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CULTURAL RESOURCE INVENTORY AND EVALUATION

Red Lodge East Bench - Washoe - Highway - Burns - Smith Mines

For

THE MONTANA DEPARTMENT OF STATE LANDS
1625 - 11th Avenue
Helena, Montana 59601

BY

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May 6, 1983

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INTRODUCTION

In September of 1982 the Mineral Research Center in Butte, Montana was requested by the Montana Department of State Lands (DSL) to perform a cultural resource inventory and evaluation of several abandoned coal mines in Carbon County, Montana (Figures 1 and 2).

In the interest of public safety and health the DSL plans to close all open adits, remove remaining structures and reclaim disturbed areas at the mines through removal, contouring and/or revegetation.

The following report will describe the physical setting, the historic background and the present state of the Red Lodge East Bench, Washoe, Highway, Burns and Smith Mines. An evaluation as to the eligibility of the sites to the National Register of Historic Places and a summary of projected impact on the sites will be given.

All field notes, photographs and supportive information resulting from the cultural resource fieldwork are maintained at the office of GCM Services, Inc., Butte.

Field investigations were conducted during October, 1982. The Principal Investigator and Project Director is Paul Anderson.

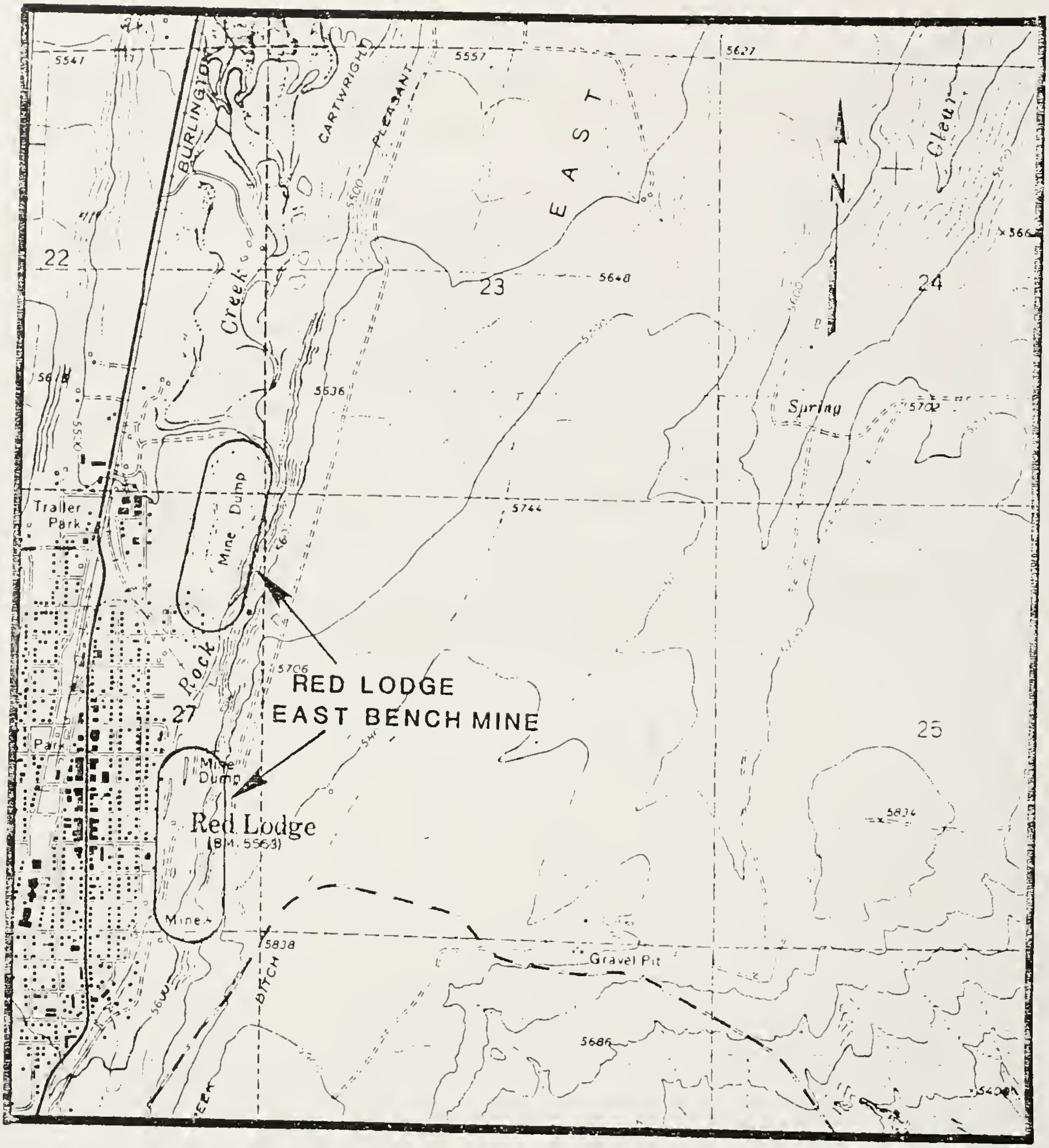


Figure 1. Map showing location Red Lodge project area. (USGS Quadrangle Red Lodge East, Mont. N4507.5-W10907.5/7.5 - 1969, 1:24,000).

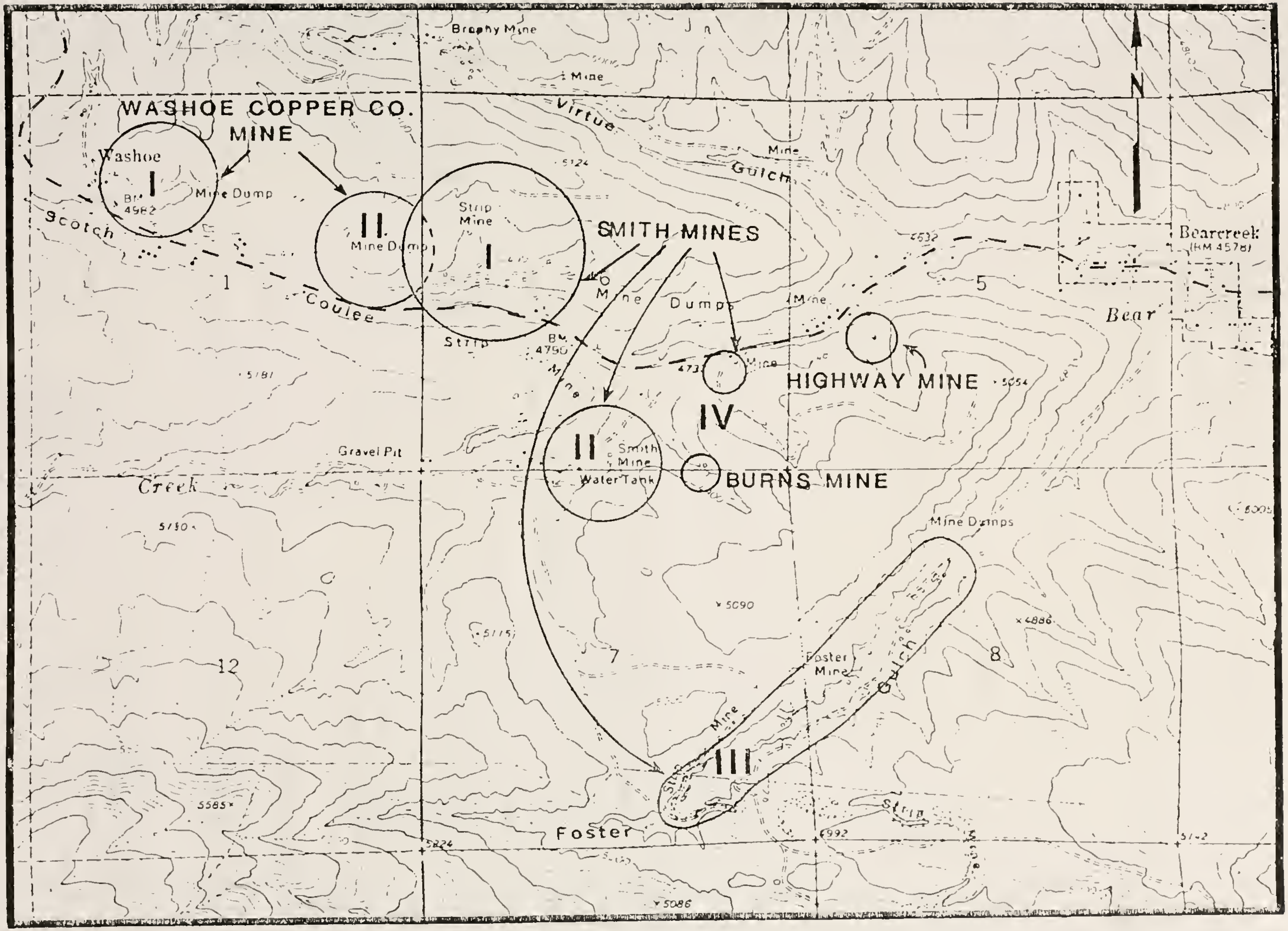


Figure 2. Map showing location Bear Creek project area. (USGS Quadrangle Red Lodge East, Mont. N4507.5-W10907.5/7.5 - 1969, 1:24,000).

LEGAL DESCRIPTION OF PROJECT MINES

Red Lodge East Bench: E1/2 NE1/4 and E1/2 SE1/4 Section 27, T7S R20E

Washoe: N1/2 Section 1, T8S R20E

Burns: SE1/4 SW1/4 and SW1/4 SE1/4 of SE1/4 Section 6, T8S R21E
NE1/4 SW1/4 and NW1/4 NE1/4 of NE1/4 Section 7, T8S R21E

Highway: SE1/4 NW1/4 SW1/4 Section 5, T8S R21E

Smith Complex:
(I) NW1/4 Section 6, T8S R21E
(II) SE1/4 SW1/4 and SW1/4 SE1/4 Section 6, T8S R21E
(III) SE1/4 Section 7 and NW1/4 SW1/4 of NW1/4 Section 8, T8S R21E
(IV) NE1/4 SE1/4 Section 6, T8S R21E

METHODOLOGY

The project area was carefully examined by the project team and the sites were recorded, mapped and photographed. Undisturbed areas were systematically examined for possible prehistoric activities. However, large areas of these sites were severely disturbed by mining activities and had there been any prehistoric cultural materials they would have long since been buried or destroyed.

The state site files at the University of Montana; the Montana Historical Society's Historic Preservation Office files; and the Montana Fish and Game Commission's Historic Sites Compendium were searched for previously recorded sites in the area. The state site files revealed two prehistoric sites in the vicinity of the project areas: 24CB401 in the NE1/4 of section 23, T7S R20E and 24CB470 in section 6, T8S R21E (discussed in the Prehistoric Background section in this report). The Historic Sites Compendium lists four historic sites in or near either Red Lodge or Bearcreek. These sites include:

The Bearcreek (Smith) Mine Disaster. This event is discussed in this report.

The Black and White Trail. This trail was established during the 1870s from Red Lodge to Cooke City. Named by Dr. Seigfriedt, a local area mine doctor, the trail was the forerunner of the Beartooth Highway.

Liver Eatin' (John) Johnson Cabin. The cabin of the colorful one-time sheriff of Red Lodge, trapper and scout is located near Red Lodge and dates from the late 1880s. Johnson's life has been the subject of a number of books and movies, although the incident which gave him his unique nickname apparently never happened. Johnson was alleged to have eaten part of the liver on an Indian warrior he had killed during a fight but Johnson claimed (and was supported by other witnesses) he had only pretended to take a bite from the liver.

Meeteetse Trail. This stage and freight road from Red Lodge to Meeteetse, Wyoming was established in 1888. The road provided access to the railhead at Red Lodge for the settlements in the Big Horn Basin area.

Other historic sites in the Red Lodge-Bearcreek area consist of other coal mines. None of the above mentioned sites will be impacted by the Department of State Lands mine reclamation program.

GENERAL FEATURES AND PHYSIOGRAPHY OF THE PROJECT AREA

The Red Lodge coal field is located on the northeastern edge of the Beartooth Mountains, extending eastward to the western slope of the Pryor Mountains. The field is drained by the Clark Fork of the Yellowstone which flows northward into the Yellowstone River and by Rock Creek which begins in the Beartooth Mountains, flows northward and joins the Clark Fork east of the town of Joliet. The Clark Fork flows, for the most part, through a deep, wide valley while Rock Creek flows through an elevated, shallow valley. The Bear Creek portion of the field is drained primarily by Bear Creek which flows eastward until it joins the Clark Fork at Belfry. One topographical feature which shaped the history and development of the area is the high terrace remnant which forms a narrow divide between the head of Bear Creek and the valley of Rock Creek. This feature prevented the building of a direct rail connection between Red Lodge and Bear Creek, separating development of the two communities and their coal fields. Most of the countryside in the vicinity of Bear Creek consists of hilly country with deep, narrow valleys between high, irregular ridges and spurs. The general elevation of the area ranges from 4,500 feet (1,372 m) to 5,800 feet (1,768 m) (Darton 1907; Woodruff 1908).

Climate

The U.S. Department of Commerce reported in 1970 that Red Lodge "...has a climate pretty much of its own. Being on the northeast slope of the Rockies where winter 'chinook' winds occur a few times every year, the climate may be described in broad terms as modified continental. Charactertistic of mountain climates, the weather experienced in Red Lodge is not necessarily representative of that prevailing a few miles away in any direction." Precipitation averages 23.20 inches annually while the temperatures seldom go to extremes. The warmest temperature recorded was 101 degrees F. and the coldest is minus 40 degrees F. Summers are pleasantly cool while the winters are not too cold although there are periods of large amounts of snow (Zupan 1979:65).

The Bear Creek area, although only a few miles from Red Lodge, has a noteably different climate from Red Lodge. Being a thousand feet lower in altitude and cut off from Red Lodge by the divide, the Bear Creek area does not experience the extremes of Red Lodge. However, the Bear Creek area is considerably drier than Red Lodge and it is also noted for occasional high winds which are funneled through the valleys. One of these winds, on November 15, 1906, roared down the valley and all but flattened the town of Bearcreek (Zupan 1979).

Vegetation

There is a marked contrast between the vegetation in the vicinity of Red Lodge and the Bear Creek area due to the additional amounts of precipitation received by Red Lodge. The Bear Creek area supports a rather sparse growth of sagebrush, Rhus, cactus and range grasses with a few cottonwood trees along the streams. The Red Lodge area supports a much heavier growth of cottonwood trees and grasses while much of the area to the north and west of the town is devoted to agricultural crops.

Geology

The general geology of the Red Lodge Field is best described by E. G. Woodruff as follows (slightly abridged):

> The sedimentary rocks outcropping in the Red Lodge coal field consist mainly of sandstone and shale of the Fort Union formation, which are cut in a few places by igneous intrusions and are covered in the valleys by alluvium and on some of the interstream areas by gravel. The sandstone and shale of this formation comprise a mass of rocks 8,500 feet thick, in which carbonaceous shale and coal beds are intercalated at various horizons. Workable coal beds, however, are confined to a zone above the middle of the section.
>
> The lowest member is composed mostly of yellowish sandstone and shale. Beginning 1,650 feet above the bottom of the formation is a group of beds 1,000 feet thick, composed of varicolored sandy shale with a few beds of soft yellowish sandstone, numerous beds of carbonaceous shale, and in the upper part a few coal beds.
>
> In the middle productive member of the formation the sandstone and shale resemble the sandstone and shale of the lower member and do not seems to indicate any essential difference in conditions of deposition, but the carbonaceous shale and workable coal beds intercalated with the other rocks serve to distinguish the member.
>
> The coal beds were apparently deposited in basins which are believed to have been shallower toward the southwest, because all the coals thin in that direction or merge into carbonaceous shale, whereas to the northwest the beds thicken to the western limit of the field.
>
> The upper barren member of the Fort Union formation is composed, like the lower member, of sandstone and shale, with a very little carbonaceous material. Shale predominates in the lower portion and sandstone in the upper portion.
>
> Since the Fort Union sediments were deposited they have been tilted and eroded and in places covered by gravel and alluvium. The terrace deposits, which consist mostly of coarse sand and gravel with boulders here and there, are spread as a thin covering over the older rocks.
>
> Small dikes cut the sedimentary rocks and outside of the gravel-covered area form low dark-colored ridges extending in a northwest-southwest direction across the field. The dikes are so thoroughly disintegrated that they interfere very little with coal mining where they have been encountered. They seem to have caused no displacement of the strata and to have had little metamorphic effect on the surrounding rocks (Woodruff 1908:92-95).

PREHISTORIC BACKGROUND

The general Northwestern Plains prehistoric cultural chronology applies to the Red Lodge area, a statement supported by the two archeological projects conducted in the vicinity. A survey of the drainage basin of the Clark's Fork of the Yellowstone was completed by L.L. Loendorf in 1976. This inventory reported 51 sites consisting of pictograph and petroglyphs, lithic scatters, stone circles, inhabited rock shelters and a number of prehistoric burials. Several of these sites are in the vicinity of the project area:

1) 24CB465. This was a burial cairn originally measuring approximately 7 ft x 4 ft in diameter. Smaller stone piles were placed around the central cairn. The cairn was destroyed; its contents were collected during Loendorf's visit. A brass ring found indicates tne burial was post-contact. This site is in section 3, T8S R20E (Loendorf 1976:89).

2) 24CB452, 24CB471, 24CB472 and 24CB464. The first three are lithic scatters and the last is a stone circle site in section 3, T8S R20E.

3) 24CB470. This is a stone circle site containing three intact features 17 ft in diameter and possibly 12 additional disturbed rings. This site is in SW1/4 of section 6, T8S R21E on the high area overlooking Bear Creek to the east and Scotch Coulee to the north.

The most significant archeological site in the Red Lodge area is the Red Lodge site (24CB401). It was first discovered in the 1930s when one of the coal mine tunnels collapsed exposing a soil profile which contained bone and stone tools. Folsom or "Yuma" points were associated and subsequently the site was excavated in 1938 by the WPA under the direction of Melvin Sayre and Raymond Thompson. The analysis and report preparation were conducted by William Mulloy and a report describing the results prepared (Mulloy 1943). The site contained Paleo-Indian materials (Folsom, Brown's Valley, Agate Basin) and later materials. Although the site has been excavated, the work was conducted when archeological methodology was poorly developed. Most of the cultural deposit was removed at this time but it is anticipated that at least a minimal amount is left. Although this site is outside the present area of planned reclamation activity, any future plans for this area should consider this significant location. The site is located in the NE 1/4 of section 23, T7S R20E.

The Red Lodge site (24CB401) and 24CB470 are the two locations within a mile or less from the areas of potential impact. The Red Lodge site is on top of old mined lands and has already been partially disturbed by collapsing tunnels. Site 24CB470 is on a high ridge south of the Smith Mine and should not be disturbed by the reclamation activity.

HISTORIC BACKGROUND
by
Robert A. Murray

In the spring of 1860 Lt. Henry Maynadier, with one wing of Captain William F. Raynold's military mapping expedition came down the Clark's Fork and prepared the first generalized maps of main topographic features such as the Bear Tooth Range. Wtihin the next two years, gold-seekers came to the valleys of western Montana in large numbers and created an eastward-moving Montana frontier that reached the Gallatin Valley in 1863. Prospectors and placermen moved restlessly out beyond that frontier, and in the summer of 1866 a very large force of these men, led by Jefferson Standifer, prospected for gold in all the streams along the foot of the Bear Tooth Range (Maynadier 1868; Topping 1968).

One of these men was James "Yankee Jim" George who found the coal seams exposed on the east side of Rock Creek. There was no accessible market, so many years elapsed before any attempt could be made to utilize this coal (Zupan 1979).

Settlement began along the Clark's Fork with the coming of the open-range cattle industry to the area in 1879-1880. Two years later the Northern Pacific Railroad completed its main line up the Yellowstone Valley and over Bozeman Pass and set off a whole new wave of settlement in the region. Increased prospects of a market for railroad and domestic fuel stirred the interest of Montana pioneers to develop coal resources (Topping 1968).

Opening Up the Field, 1882-1889

At this point, "Yankee Jim" George told N. B. Black and Walter Copper of Bozeman about the coal deposits. These men secured a significant area of coal land and brought together additional capital from Sam Word, Samuel Hauser and other investors. In 1882, they took two wagon-loads of coal to Billings for promotional purposes. At this time the railroad obtained coal for the middle of its long line from the Chesnut Mines near Bozeman. But the promoters persisted, and organized the Rocky Fork Coal Company with the aid of major eastern investors including Henry Villard. Villard at this time substantially controlled the Northern Pacific system (Northwest Magazine 1889 and 1892; Pacific Historical Review 1965).

In December of 1884, the Post Office Department opened a post office at Red Lodge. The postmaster was also the agent in charge of the Rocky Fork Coal Company properties (Zupan 1979).

The Rocky Fork and Cooke City Railway Company began construction of a line from Laurel, on the Northern Pacific toward Red Lodge in October of 1887. This line reached completion in March of 1889. With railroad construction underway, development of the mines began insofar as that was possible until the rails could bring in heavy equipment and construction supplies. Using hand-steel and black-powder, the miners pushed exploratory tunnels east of Rock Fork into the main coal seams. Then, when the railroad came in, commercial mining got underway. In 1889, some 6,000 tons of coal were shipped out from these mines and production expanded rapidly beyond that point (Northwest Magazine 1889 and 1892).

Reorganization and Expansion

The Northern Pacific Railroad ran into financial trouble in the early 1890s. In 1896, the company reorganized as the Northern Pacific Railway Company. The new company held 3,154 out of 20,000 shares of the Rocky Fork Coal Company and individuals connected with the railroad owned much of the rest. In March of 1898, the railway company sent in two mining men to examine the property. Based on their findings, the company decided to buy up these mines as fast as they could ("History and Present Operations..." 1905).

The previous year, the Northern Pacific Railway Company set up a wholly-owned subsidiary called the Northwestern Improvement Company to manage all of its lands and businesses other than the rail line itself. The NWI began to buy up stock in the Rocky Fork Coal Company and by October of 1903 held all of that stock. They then dissolved the older company and held these mines as a division of NWI ("History and Present Operations..." 1905).

NWI invested a greal deal of money in expanding these mines into the largest coal producer in Montana. Output rose from 232,361 tons in 1896 to over 400,000 tons in 1901 and over half a million tons a year for the rest of that decade. Then from 1910 to 1923, production jumped to generally over 800,000 tons of coal a year, and exceeded a million tons in 1917 and 1920 (Coal Production Tables).

In 1922, Lochren Donnelly of the Northern Pacific prepared a study on alternative coal development possibilities on other Northern Pacific lands. He projected a much lower coal cost could be attained by stripping coal from shallow deposits on Rosebud Creek, some 30 miles off the main line in eastern Montana. The work could be done by a contractor using non-union labor and this would avert the possibility of strikes. In late 1923, Foley Brothers Company contracted to operate the mines at what became known as Colstrip. They began mining in late summer of 1924, and over their first five years brought out 3,000,000 tons of coal. As production rose at Colstrip, it was cut back at Red Lodge. Finally in 1932, the NWI produced only 54,000 tons of coal at Red Lodge and closed down the operations. Over the years from 1896 to 1932, these mines yielded nearly 21,000,000 tons of coal (Evans and Peterson 1907).

Opening Up the Bear Creek Coal Field

By the turn of the century, other companies were interested in developing portions of the coal seams exposed in the Bear Creek drainage. However, development progressed slowly due to the lack of rail transporation.

The Montana Coal and Iron Company (organized in 1889) started removing some coal during what was essentially exploration and development work in 1900, hauling it over the hill to Red Lodge in wagons. Over the next few years, they worked their mine (the Smith Mine) for three or four months per year and shipped an average of 100 car-loads of coal from Red Lodge each season. NWI discussed the possibility of purchasing Montana Coal and Iron Company. They did purchase stock in it, but never obtained the balance and remained minority stockholders for some years (Darton 1907; Fisher 1904).

Principal organizer of the MC&I was Elijah Smith of Boston, along with a number of Billings area businessmen. The Smith family remained active in the company for many years (Fisher 1906).

The Northern Pacific built a branch line to Bridger, Montana in 1903. At that point, a promoter named S. A. Hall planned a new rail line. He called it "The Yellowstone Park Railroad" and intended to run the line from Bridger to Belfry and Bearcreek, then on up into the Bear Tooth range through Clark's Fork Canyon to the Cooke City silver/lead mines and on to the Park. A number of his grandiose plans did not find backers, but with the help of the coal developers in the Bear Creek portion of the field, the line was built to Bearcreek in 1906 and extended to Washoe in 1907. This set off a period of expanded coal development (Fisher 1906).

The Amalgamated Copper Company (soon to be renamed the Anaconda Copper Company) opened its Washoe Mine in 1907, but did not immediately begin to ship coal because of the slump that year in its copper business.

The International Coal Company (probably a subsidiary of the Valley Camp Coal Company of West Virginia) shipped 100 tons a day in 1907. The Bear Creek Coal Company was the largest of the 1907 period operations, getting out about 400 tons a day. James Francis Brophy, a West Virginia coal developer, came out in 1906 to open mines for his Smokeless and Sootless Coal Company (Woodruff 1907; Brophy 1982).

Each of these companies operated in the district for a number of years, with the general peak of activity, like that of most of the region's coal mines, being around the First World War, when the coal market was very strong and serious competition from other fuels had not yet developed. The mines in the Bear Creek area suffered from depressed conditions in the market in the 1920s and from increased competition from natural gas and hydroelectric power in the 1930s. Some of them experienced a substantial revival in the Second World War years.

Mining on the Bear Creek side of the field suffered a heavy blow in 1953 when the Northern Pacific shut down its Bridger branch and the Montana Southern and Western stopped serving the mines. Of the sizeable operations, only the Brophy mines remained active after that year and on into 1967 (Brophy 1982). There was renewed interest in the field during the coal boom years of the 1970s, and some new exploration work was undertaken but this now appears to have peaked out and the quiet hills around Bearceek and Red Lodge contrast sharply to the busy mines and towns that once worked here.

SITE DESCRIPTION

Site Identification: 24CB193 Northwestern Improvement Company East Bench Mine

Site Location: E1/2 NE1/4 and E1/2 SE1/4 Section 27, T7S R20E

Elevation: 1707 m

Site Area: 340,000 m^2

Site Description: The site is located adjacent to the east side of Rock Creek except for the large mine dump area at the north end of the site along the west side of the creek (Figure 1). The main mine complex was situated on the low stream bottom bench area with the mine adits extending into the steep hillside to the east. Vegetation on the site consists primarily of grasses, sagebrush, *Rhus* and cottonwood trees.

Structures and Cultural Materials: The mine was the first opened in the Red Lodge area and it became the largest of the area's mines yet very little remains on the site from this once extensive operation (Figures 3 and 4). A large part of the physical remnants still found on the site - consisting of concrete foundations (features #12-19) - were not associated with the coal mine but rather are the ruins of a chrome concentration mill. The mill was built by the Stearns-Rogers Company in 1941 which later burned down in 1951 (Figures 5 and 6).

Only three structures remain intact from the coal mining operation. The power plant (feature #9) is the most prominent building and is still in a good state of preservation (Figure 7). The two-story high structure measures 12 x 40 m. It is partially sided with tin and has a tin roof. It has no distinctive architectural features.

② The fan housing (feature #10) is located to the east of the power plant against the hillside and adjacent to an adit opening. The massive concrete structure measures 8 x 18 m and has a barrel vault roof over the front (west half). The double, metal fans are still in place and measure 3 m in diameter (Figure 8).

Feature #17 is partially intact and somewhat resembles feature 10 (Figure 9). The concrete structure is most likely associated with the chrome mill since it is not shown on the Northwestern Improvement Company's 1931 map.

③ The Powder magazine (feature #20) is the only other standing structure on the site. The windowless, brick structure measures 3.5 x 13 m and has a corrugated tin roof. It is in a fair state of preservation but has no distinctive characteristics or architectural significance (Figure 10).

Most of the remaining cultural materials on the site consist of debris, miscellaneous concrete foundations and coal waste dumps (Figure 11).

The large coal waste area north of the mining complex at the northeast corner of section 27 and the southeast corner of section 22 did not reveal any evidence of any cultural materials (Figure 12).

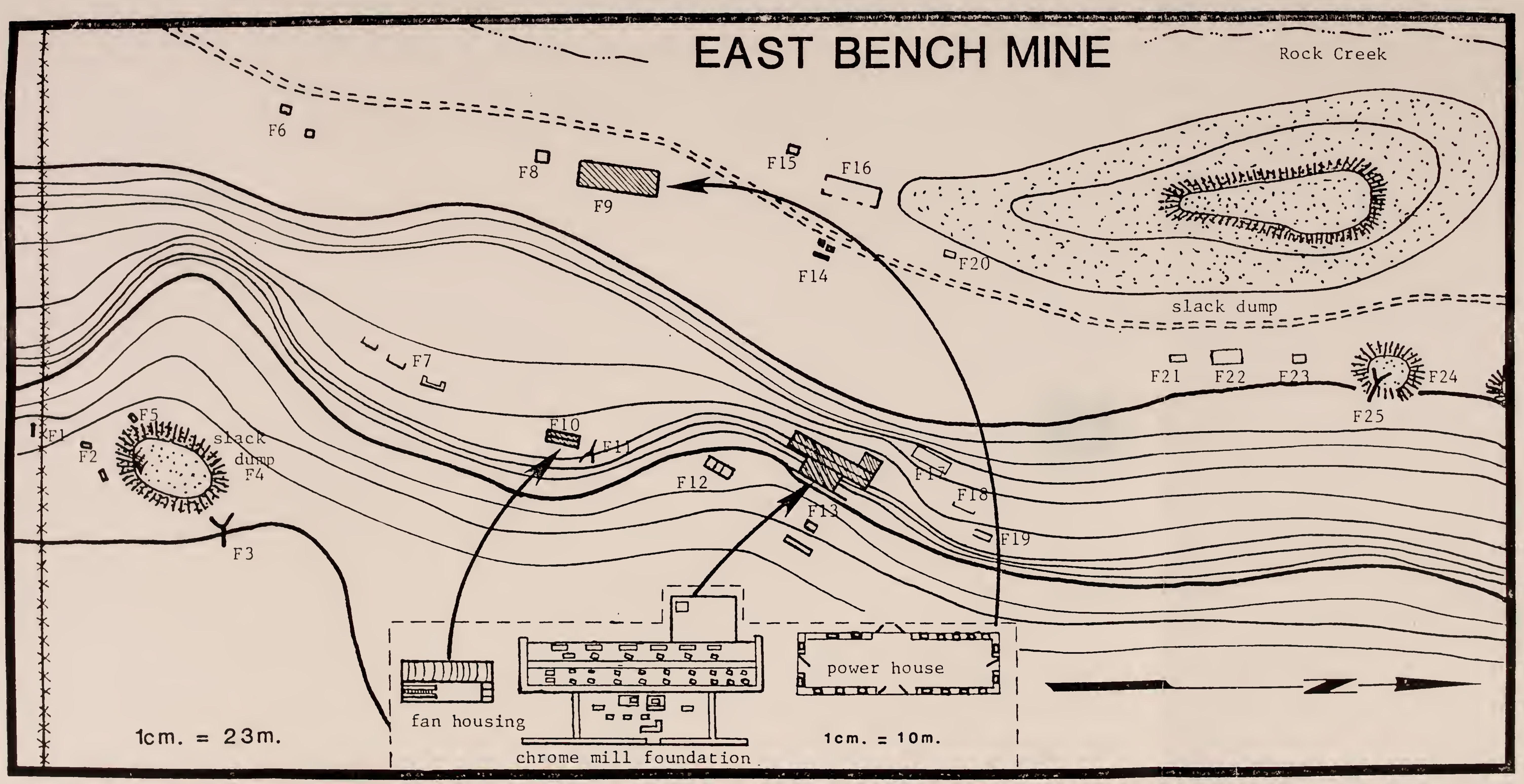
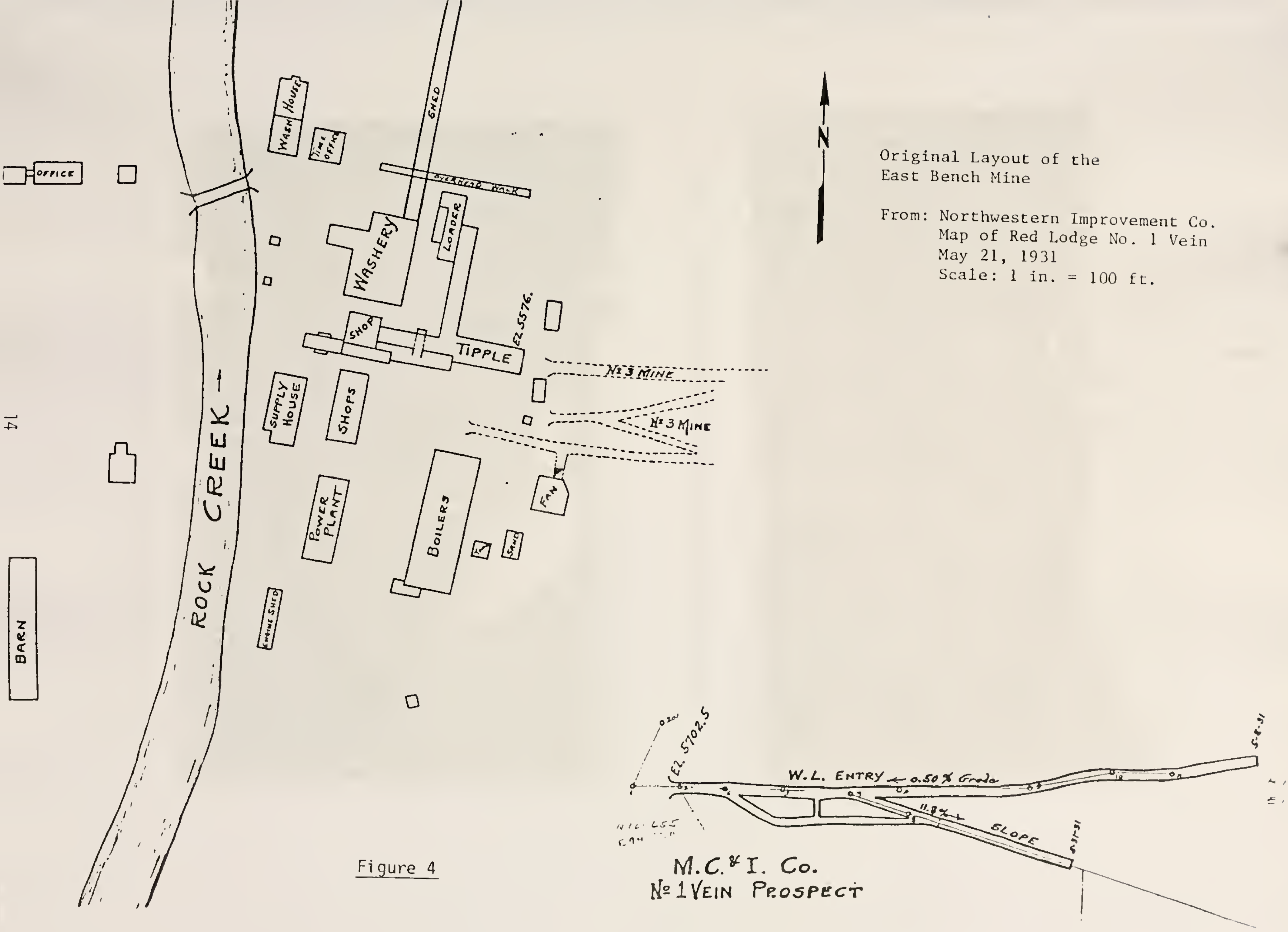

EAST BENCH MINE
Rock Creek
F1
F2
F3
F4
F5
slack dump
F6
F7
F8
F9
F10
F11
F12
F13
F14
F15
F16
F17
F18
F19
F20
slack dump
F21
F22
F23
F24
F25
fan housing
chrome mill foundation
power house
1cm. = 23m.
1cm. = 10m.
N

Figure 3



Original Layout of the
East Bench Mine

From: Northwestern Improvement Co.
Map of Red Lodge No. 1 Vein
May 21, 1931
Scale: 1 in. = 100 ft.

Figure 4

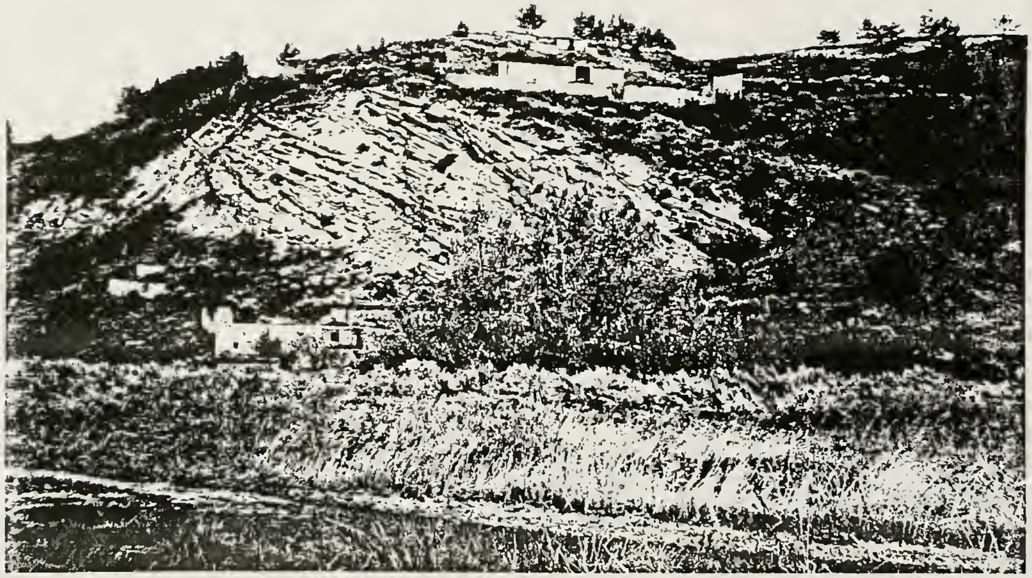


Figure 5. Chrome mill ruins (view to east).

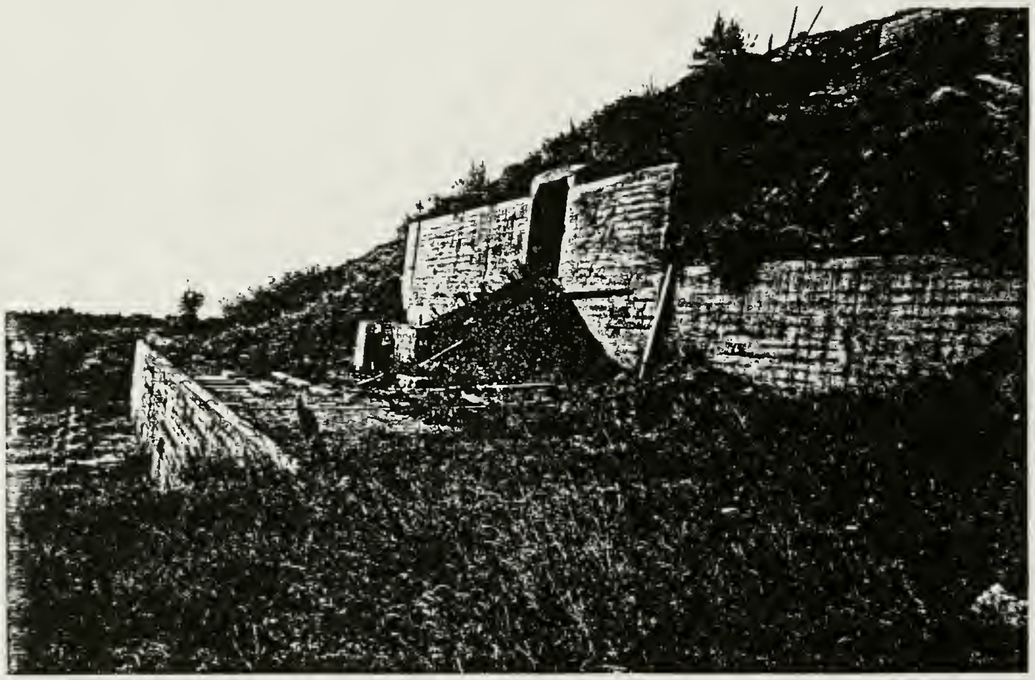


Figure 6. Upper foundation for chrome mill (view to north).

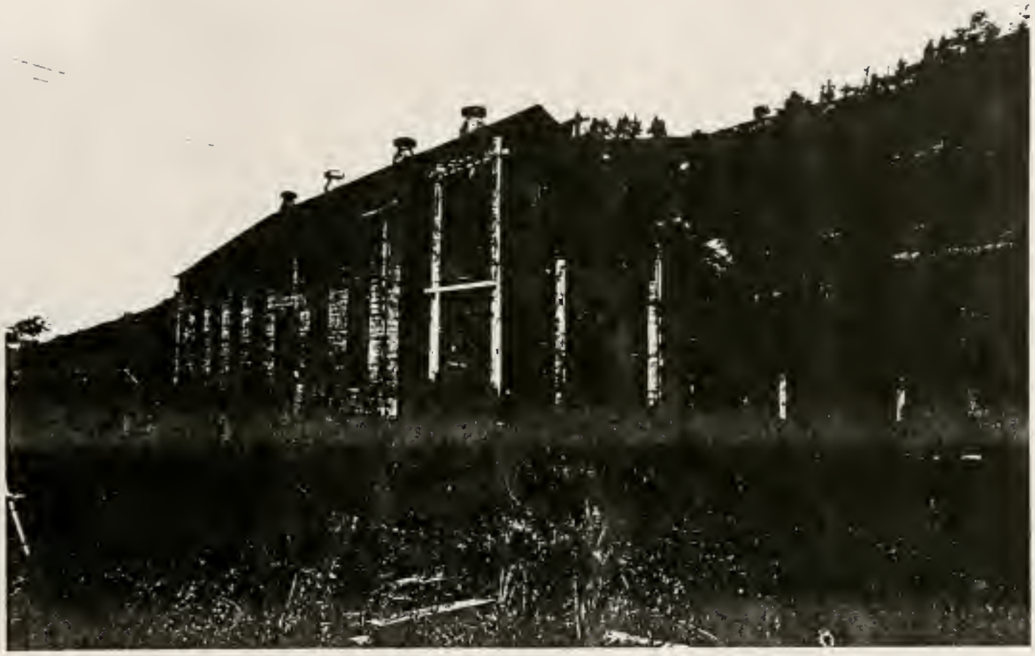


Figure 7. East Bench Mine power house (view to northeast).

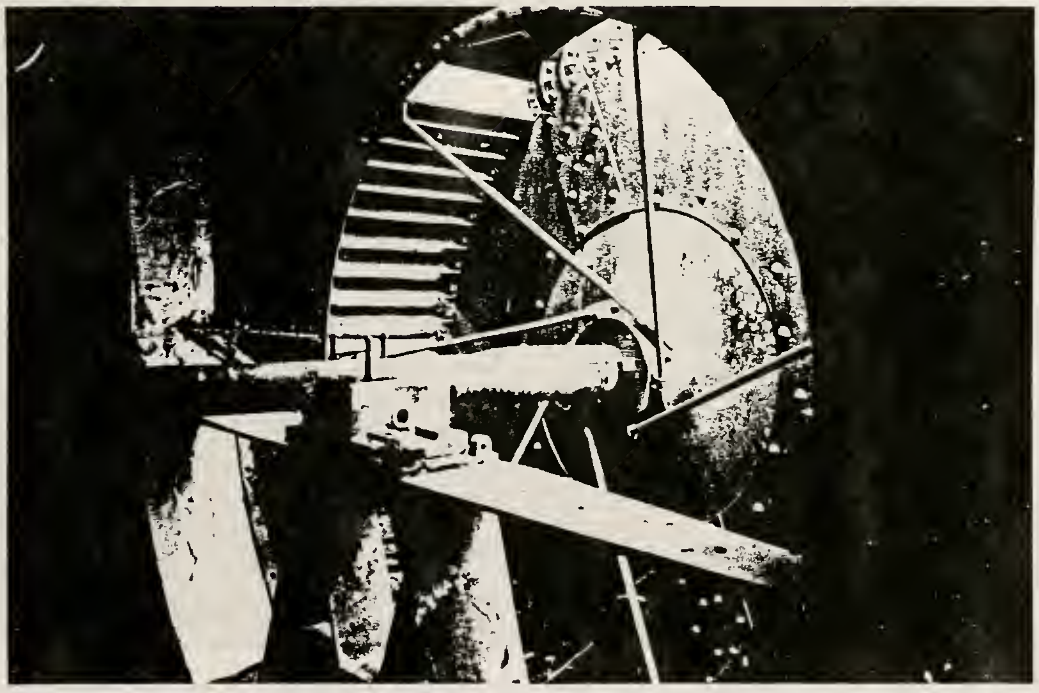


Figure 8. Iron fan inside concrete fan housing (view to east).

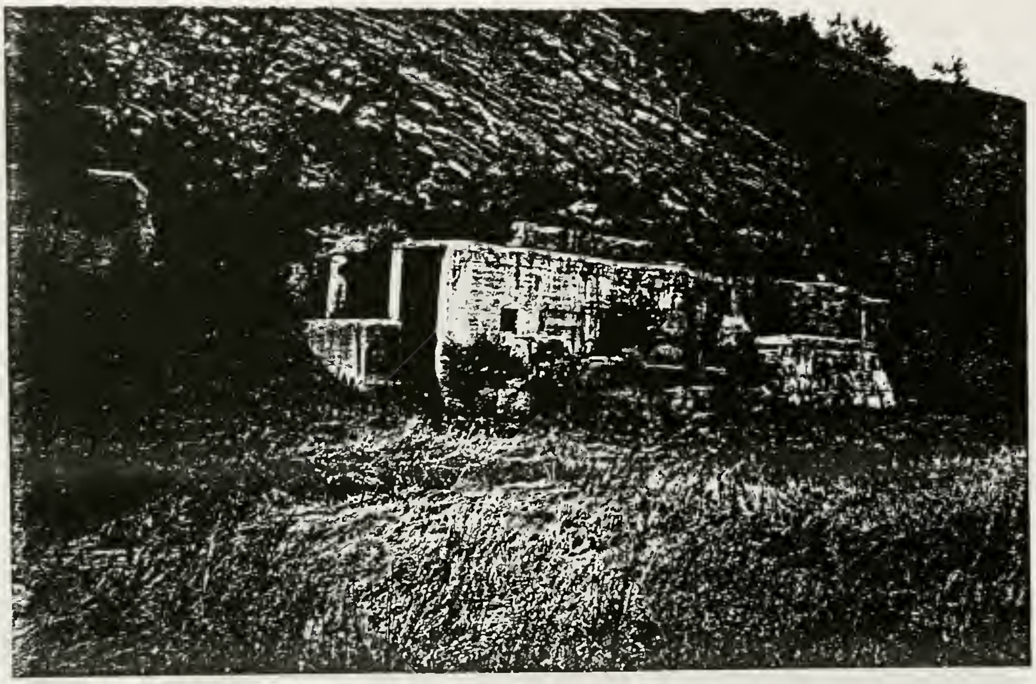


Figure 9. Concrete structure at the base of chrome mill ruins (view to east).

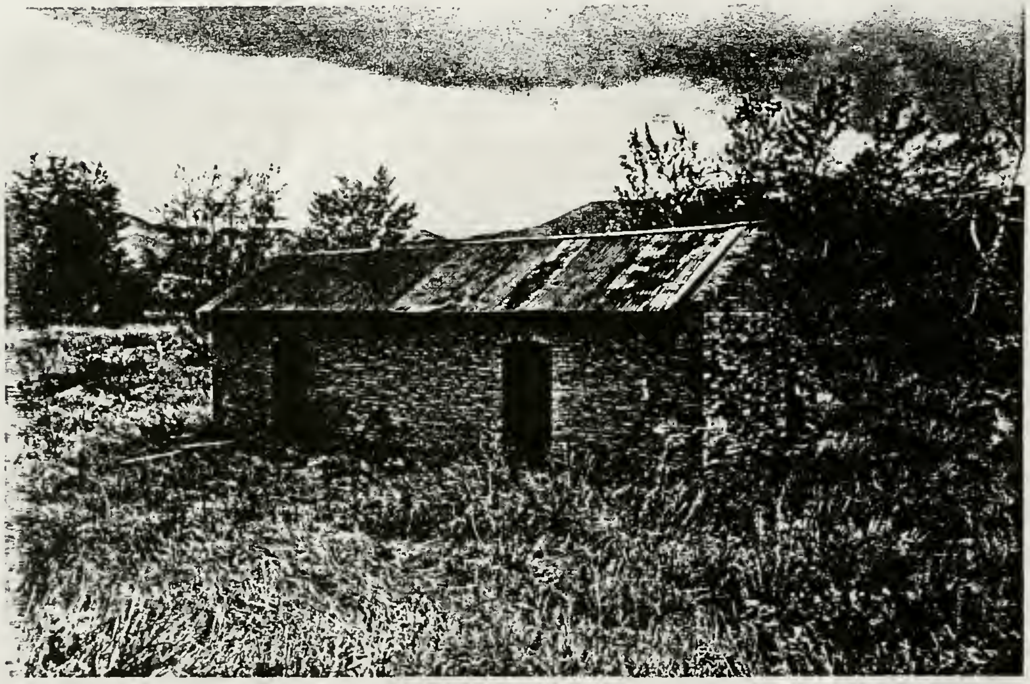


Figure 10. Powder Magazine for East Bench Mine (view to west).

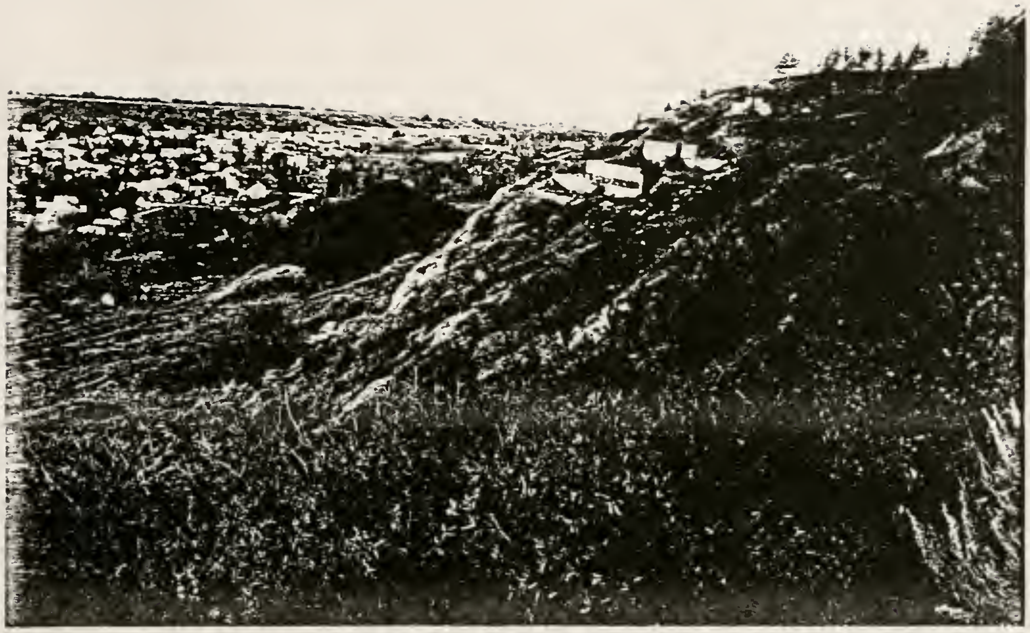


Figure 11. View of chrome mill ruins and waste dump (view to northwest).

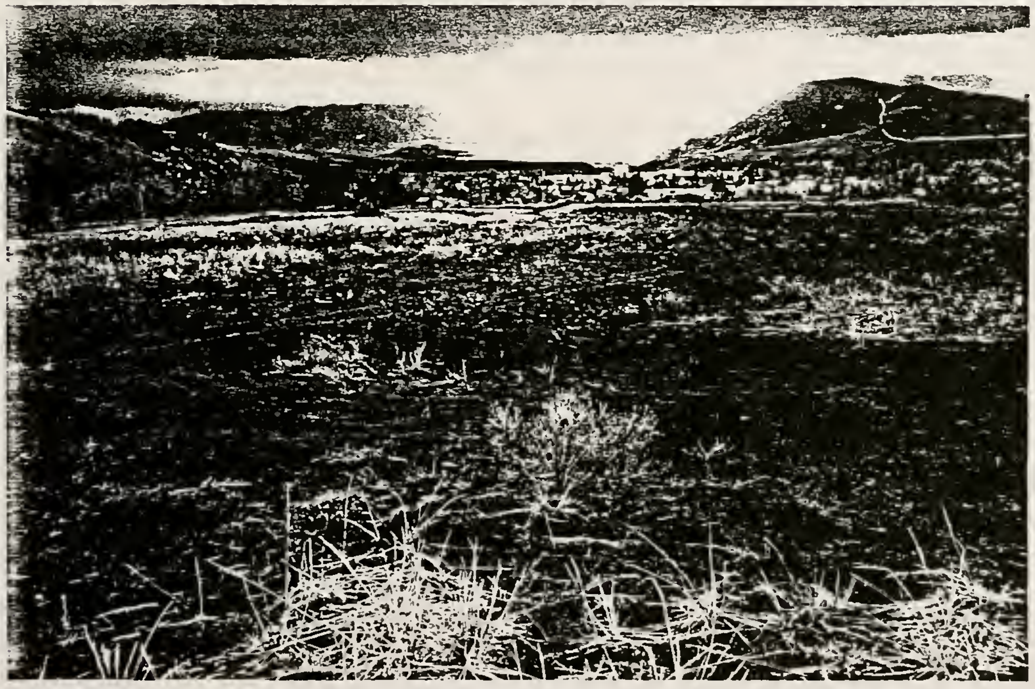


Figure 12. Coal waste dump north of mine area (view to north).

Historic Development: The first production of coal on the site occurred in 1887 by the Rocky Fork Coal Company which had been formed by Sam Work, Sam Hauser, Frank White, J. L. Platt and Henry Villard (who controlled the Northern Pacific Railroad). During the first two years the company engaged in development work at the site since there was no accessible market for the coal. This problem was solved in 1889 when the Northern Pacific completed a branch line from Laurel to Red Lodge. With the completion of the railroad, the Rocky Fork Mine was ideally situated for rapid development. The coal was of high quality and easily mined. Although the railroad rose 2,340 feet from the Yellowstone River to Red Lodge, it was a consistent grade with few curves and the trains were able to haul as many loaded cars down the grade as they could pull empties up the grade (Northwest Magazine June, 1889).

By late 1891 the mine was employing 400 miners and producing an average of 800 tons of coal a day. But then, for some unknown reasons, production dropped off during the next few years. Apparently the company experienced financial trouble in spite of the backing of Villard and in 1898 controlling interest in the mines was acquired by the Northern Pacific Railway Company. The railroad formed a subsidiary - the Northwestern Improvement Company - and reorganized the mining operating with H. J. Horn as general manager and Robert Pettigrew as general superintendent ("History and Present Operations ..."1905).

Under the new management production increased and improvements were made at the mine. The mine was totally electrified with power coming from a generating plant at the mine. The steel tipple had a capacity of 3,000 tons a day and was equipped with revolving and shaking screens, picking tables, a gravity box-car loader, eight spiral separators and a 600 ton Luhrig washer. By 1906 some 500 miners and 100 outside men were employed and 356,573 tons of coal were produced in 209 working days (Darton 1906).

Two major disasters occurred in the mine during this period. On June 7, 1906 two separate fires started inside the mine by spontaneous combustion. Six miners died from the gas generated by the mine and then two more men died during rescue operations. Two years later on November 20, 1908, nine men were killed in another fire at the mine. A wooden crib used for roof support caught fire and the smoke filled the mine, overcoming the nine miners. Poor ventilation was blamed as a major cause for the deaths in both fires (Zupan 1979).

Improvements were made in the mine and from 1910 to the end of World War One the area's coal mines experienced a decade of prosperity and booming production. During this time the Red Lodge mines were the largest and most productive in the state. The Red Lodge mines produced an average of a million tons annually during the war years, peaking in 1917 with 1,052,055 tons mined (Morgan 1966: Rowe 1905).

Following the war, production began to decline as demand dropped and a series of strikes closed down the mines. The ultimate beginning of the end for the Red Lodge mines came in 1923 when the Northern Pacific contracted the Foley Brothers Company to start a strip mine at Colstrip. Once the strip mine went into production in 1924 coal could be produced cheaper with non-union labor than it could at either of the company's Red Lodge mines. By 1925 Colstrip was producing three-fourths of the Northern Pacific's coal needs and it was only a matter of time before the Red Lodge operations would be phased out.

The inevitable closure came just one year later, in 1926, for the Sunshine Mine and in 1932 for the East Bench Mine. During their life spans, however, the Red Lodge mines were among the more successful coal mining operations in Montana, producing some 21,000,000 tons of coal and providing the main economic base for the town of Red Lodge (Chadwick 1973).

In 1941 there was a revival of activity at the site of the East Bench Mine when the United States Vanadium Corporation began development of the chrome deposits near the Red Lodge-Cooke City Highway. The first chrome deposits had been discovered back in 1916 by Red Lodge Mining engineer J. F. Brophy. Further discoveries were made by M. E. Martin, but in spite of the efforts of several individuals and an organization called Montana Chrome Incorporated, little was done to develop the deposits (James 1946).

The Unites States Vanadium Corporation became interested in the chromite deposits during the 1930s. A favorable report by a mining engineer with the firm, A. F. Carper, and in increasing demand for chrome after the start of World War Two led to the beginning of actual mining operations on Hell Roaring Plateau and along the Beartooth Highway in 1941. The Stearns-Rogers Company was contracted to build a chrome concentration mill at the site of the old East Bench coal mine and by January, 1941, 7,000 tons of ore were stock-piled for processing. The mill was constructed in 1942 and consisted of six buildings with a 450 ton per day capacity. Power for the operations was furnished by a 5,000 watt gasoline light plant (Zupan 1979).

In spite of an investment of nearly five million dollars and three year's work on the project, the U.S. Vanadium Corporation announced on October 8, 1943 that it was closing down the operation with very little to show for its efforts. The resumption of imports of high grade chrome ore from South Africa and the end of a government order that a percentage of domestic ore be used in refining the higher grade foreign ore, were blamed for the closure. The gravity concentration mill operated only from March to November in 1942 and produced 11,689 tons of concentrate. The mill then sat empty until 1951 when it burned down (James 1946; Zupan 1979).

Evaluation: Very little remains on the site from the original mining operation. The three intact structures still standing on the site - the power house, the fan housing and the powder magazine - are all in a fair state of preservation. None, however, possess any distinctive architectural features or exhibit any noteworthy technological characteristics. The ruins of the chrome mill consist solely of concrete foundations which show no significant characteristics.

National Register Statement: The site lacks integrity and would not appear to meet the eligibility requirements for listing on the National Register of Historic Places.

Management Recommendations: The Department of State Lands plans to remove or reclaim waste areas; close open adits and remove dangerous structures. The open adits and waste areas clearly constitute a serious source of water pollution and a threat to public safety and the department's reclamation plans should be allowed to proceed on schedule. Since the site does not appear to be eligible for listing on the NRHP this action would not constitute an adverse effect. The site has been examined, recorded, mapped and photographed and no further work is recommended.

SITE DESCRIPTION

Site Identification: 24CB194 - Washoe Copper Company Mine

Site Location: N1/2 Section 1, T8S R20E

Elevation: 1494 m

Site Area: 1,050,000 m^2

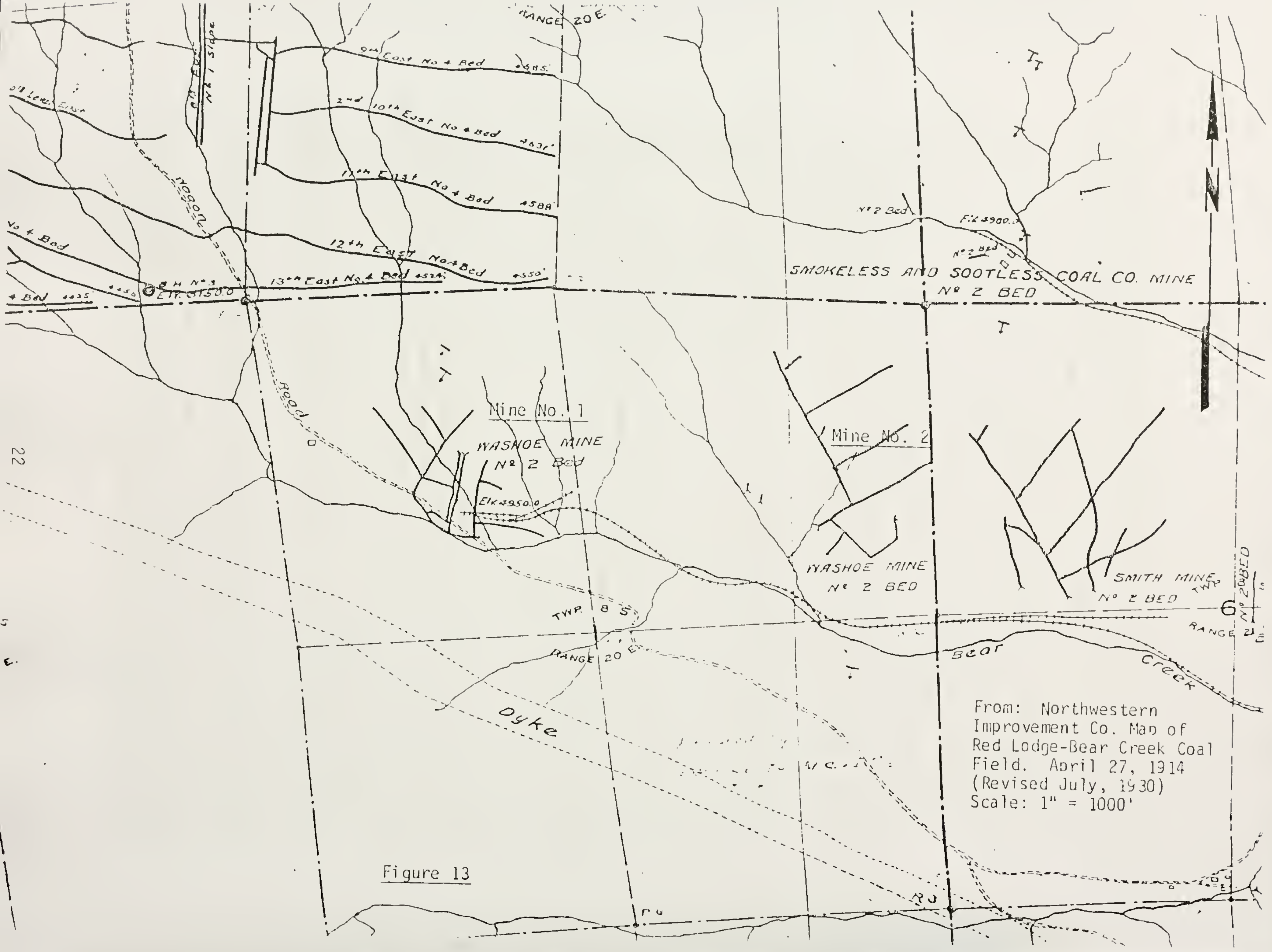
Site Description: The site covers a large surface area over much of the northern half of section 1. Most of the surface features of the site are located on the north side of the Scotch Coulee Creek on the south-facing sides of the low hills (Figure 2). Vegetation over the site is sparse and consists mostly of range grasses, Rhus, sagebrush and a few cottonwood trees along the stream.

Structures and Cultural Materials: Although once an extensive coal mining operation, very little of the original mine structures remains on the site (Figure 13). Most of the remnants are found at the west side of the site (Figure 14). The most substantial feature is the concrete footings of the tipple (Figure 15). Nothing of the tipple itself remains on the site. One hundred meters northwest of the tipple footings is a preformed concrete entrance portal with "Washoe Copper Co. Mine No. 2" cast into the top. Whether it was actually used at the number two mine is not known. The base of what appears to have been a hoist house is located 200 m north of the tipple area. Only the 13 x 18 m concrete base with a room underneath remains of the structure. A partially buried steel cable runs from this structure down the hill towards the tipple area. Dominating the rest of the west section of the site is the large coal slack dump.

Very little remains on the surface at the east side of the site to mark the location of mine number two (Figure 16). A small brick, flat-roofed building measuring 3 x 5 m which may have been a powder magazine is the only structure left that appears to have been associated with the mine. A few meters east of this building are a wood stock shed; a stone foundation and a collapsed shed. It is not known if they were associated with the mine. Small coal slack dumps are also found in this area.

Historic Development: The mines were first developed during the spring of 1907 by the Amalgamated Copper Company through its subsidiary, the Washoe Copper Company. Amalgamated planned a large-scale development in order to furnish fuel for its operations in Butte and Anaconda. A townsite was laid out and two mines were planned (Figure 12). Mine No. 1, the largest of the two, was constructed first and by the early part of 1908 extensive underground workings had been driven into the coal bed producing some 15,000 tons of coal for the Butte market.

Mine No. 2 was initiated during the fall of 1907. The mine slope carried to the lower beds and pumps were necessary since the workings were below the water table. The mine went into production in 1908 and the two mines employed 135 men, producing 72,862 tons of coal during the year.



From: Northwestern Improvement Co. Map of Red Lodge-Bear Creek Coal Field. April 27, 1914 (Revised July, 1930) Scale: 1" = 1000'

Figure 13

WASHOE MINE NO. 1

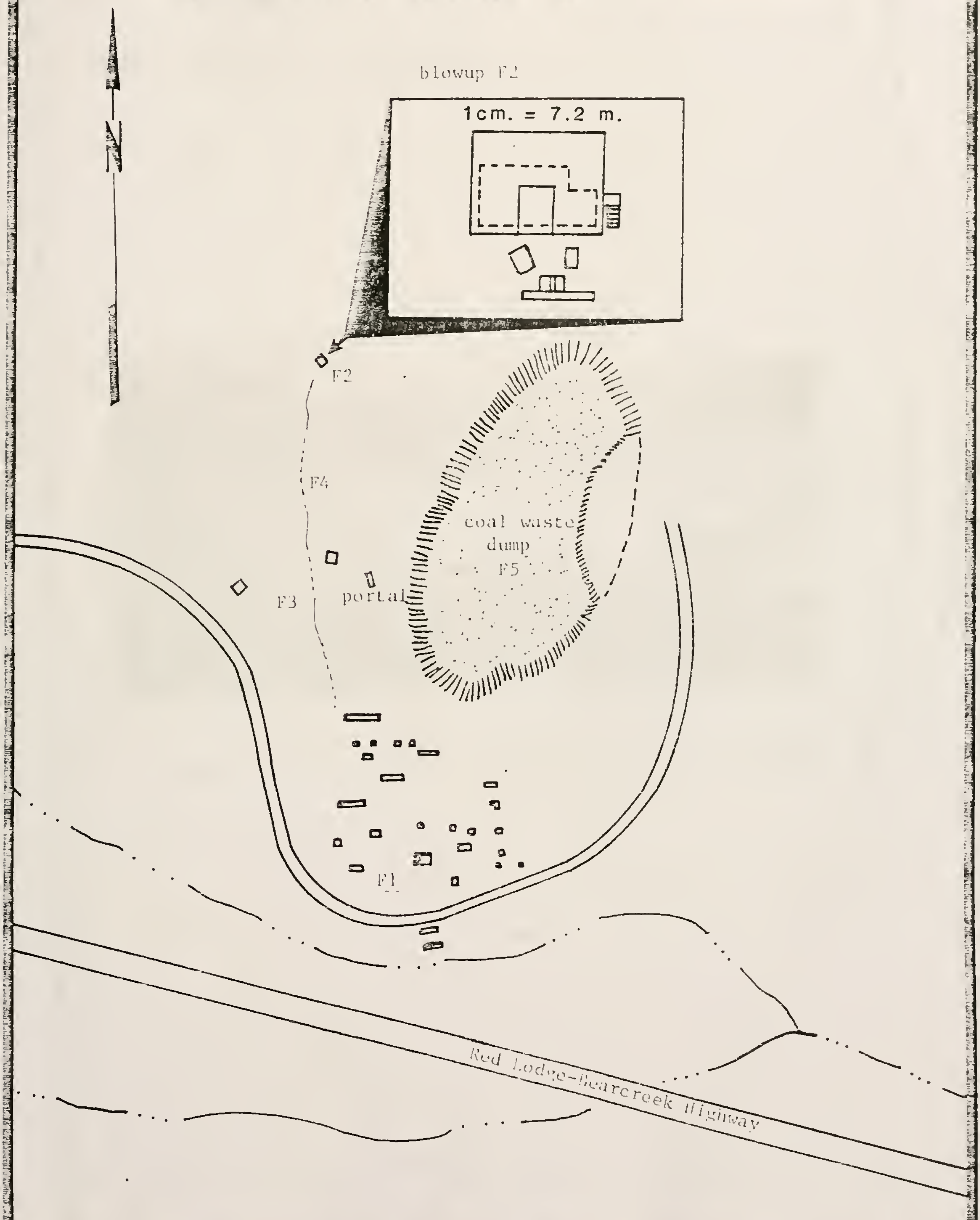


Figure 14

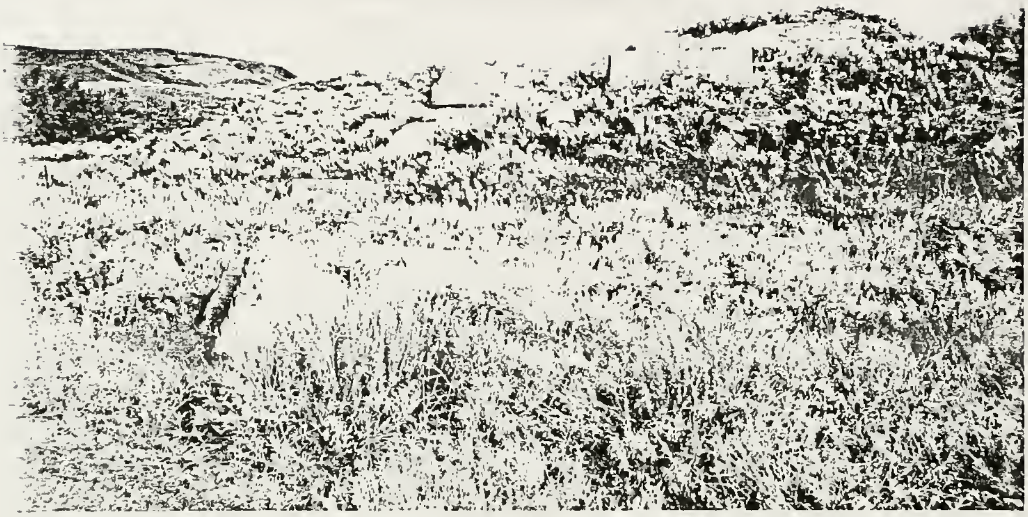


Figure 15. Remains of concrete footing for tipple at Washoe #1 (view to north).

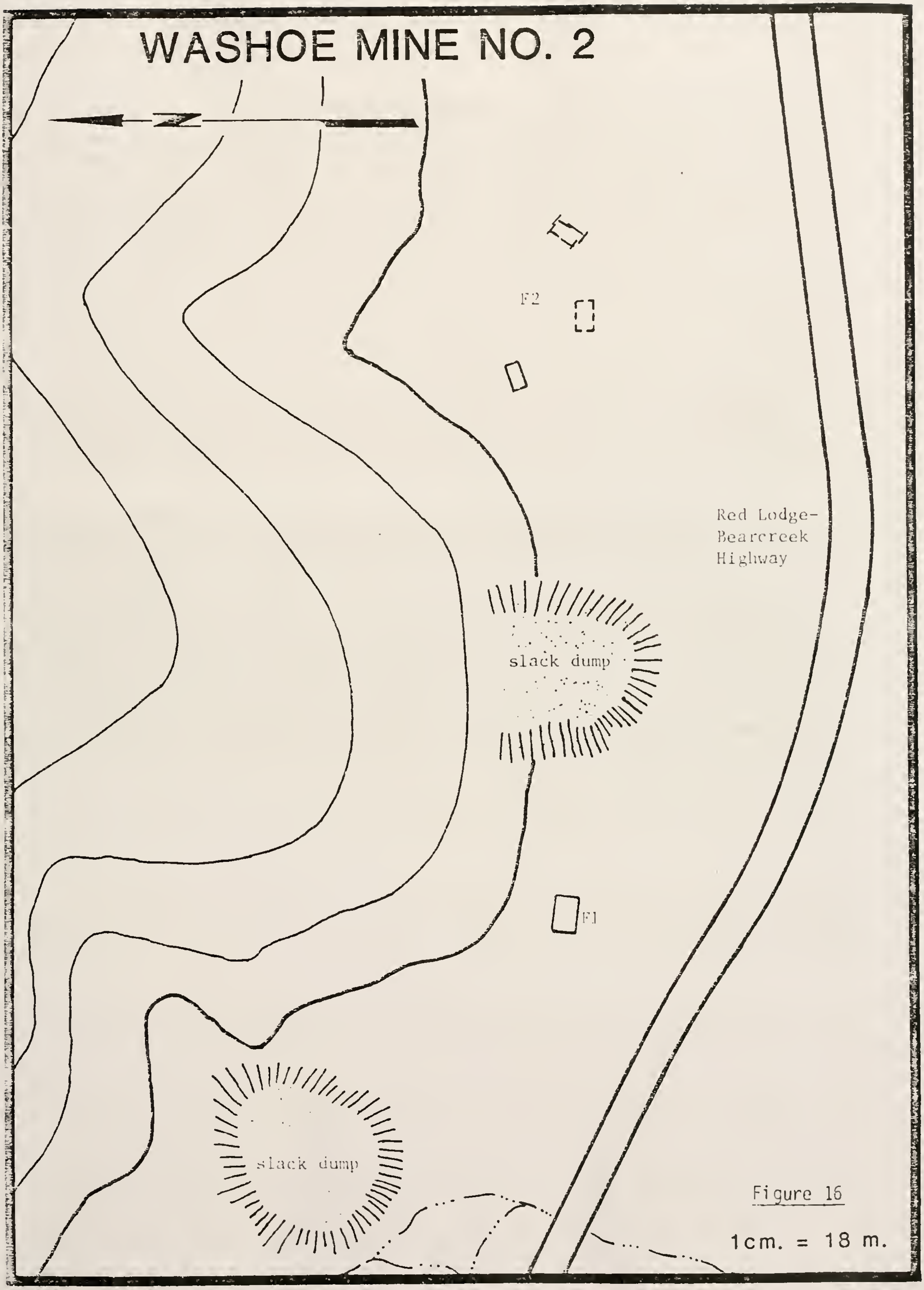

WASHOE MINE NO. 2
N
F2
slack dump
Red Lodge-
Bearcreek
Highway
F1
slack dump
1cm. = 18 m.

Figure 16

The mines were reported to be well equipped although horses were still used at the No. 1 mine to haul coal cars from the mine to the tipple. With the completion of the Montana, Wyoming and Southern Railroad ("The Yellowstone Park Railroad") to Washoe in 1907, the coal from the mines could be easily and economically shipped to Butte. However, in spite of the promising beginning and favorable circumstances, the mines never developed to their full potential and were in production for only a short period of time. A slump in the copper industry undercut the need for coal and Amalgamated Copper Company's other major mine at Belt was able to furnish much of the company's needs. This lack of demand led to the Washoe mines being shut down in 1912. They operated intermittently for a while after this closure but then were closed for good in 1938 following a serious fire and subsequent underground caving 1938 (Rowe 1909; Parsons 1907; Woodruff 1907; Brophy 1982).

Evaluation: Almost nothing remains on the site from the original mining operation and it is highly unlikely that further work on the site would reveal any additional information on mining history and technology from this period.

National Register Statement: Due to the almost complete destruction of the surface structures of the original mining operation, the site lacks integrity and is not eligible for listing on the National Register of Historic Places.

Management Recommendations: The Department of State Lands, as part of its mine reclamation program, plans to remove or reclaim waste dumps and other disturbed areas on the site which are a potential source of water pollution. The waste areas do not constitute an important aspect of site's value and their removal would be no loss to historical research. The site has been recorded, mapped and photographed and no further work on the site is recommended. The Department of State Lands should be allowed to proceed with its plans on schedule.

SITE DESCRIPTION

Site Identification: 24CB195 - The Highway Mine (Road Side Coal Company)

Site Location: SE1/4 NW1/4 SW1/4 Section 5, T8S R21E

Elevation: 1433 m

Site Area: 13,500 m^2

Site Description: The site is located a short distance up a small side gully along the north side of Bear Creek (Figure 2). Water for the mining operation could have been obtained from Bear Creek 200 m to the northwest. The tipple and mine office are at the base of the gully while the main mine entrance is found on the northeast facing hillside where the gully narrows. Vegetation around the site consists of range grasses, sagebrush and Rhus.

Structures and Cultural Materials: The basic components of the Highway Mine remain fairly intact although the tipple and some of the other structures are beginning to deteriorate (Figure 17). Adjacent to the south side of the Red Lodge-Bearcreek highway is the small (5 x 5 m) mine office (feature #1). The wood frame structure has a false front with "Road Side Coal Lump Stoker Stove" painted on it. East of the office is a small outhouse and a 3 x 5 m wood shack of unknown use (features #2 and 3). Immediately behind the office building is a 6 x 6 m concrete foundation (feature #4). No trace of the structure which stood on the foundation remains.

The tipple (feature #5) is typical in size and construction for this type of wagon mine (Figure 18). It is built of wood beams and measures 50 m long and is from 5 to 15 m wide. Two curved coal car tracks are found on top and most of the trackage to the mine from the tipple remains in place. Several coal cars are located in the area at the top of the tipple. Also in this area is a fuel tank, a junked truck with 1945 Montana license plates plus a scatter of debris (features #6 and 7).

A poignant item observed in this area was a headstone engraved with "Samuel Alexander Born - Oct. 24, 1885 Died - Feb. 27, 1943" (feature #8). Alexander was one of the victims of the Smith Mine explosion yet for some reason this headstone was not used.

The northern mine adit entrance has wooden shed cover with another small shed attached to the east corner of the entrance (feature #9). The shed may have been used as a miner's warming room - sometimes called a "dog house".

Fifty meters further up the gully and on the east side is a second adit entrance with part of the trestle crossing the gully still in place (feature #10).

Historic Development: The mine was first developed by Frank and Leopold Janskovitch around 1940. The mine was typical of the small wagon mine selling its coal to the local domestic market. The mine was one of the last producing mines in the Bear Creek area to close. The government forced the mine to shut down in 1970 due to alleged safety violations.

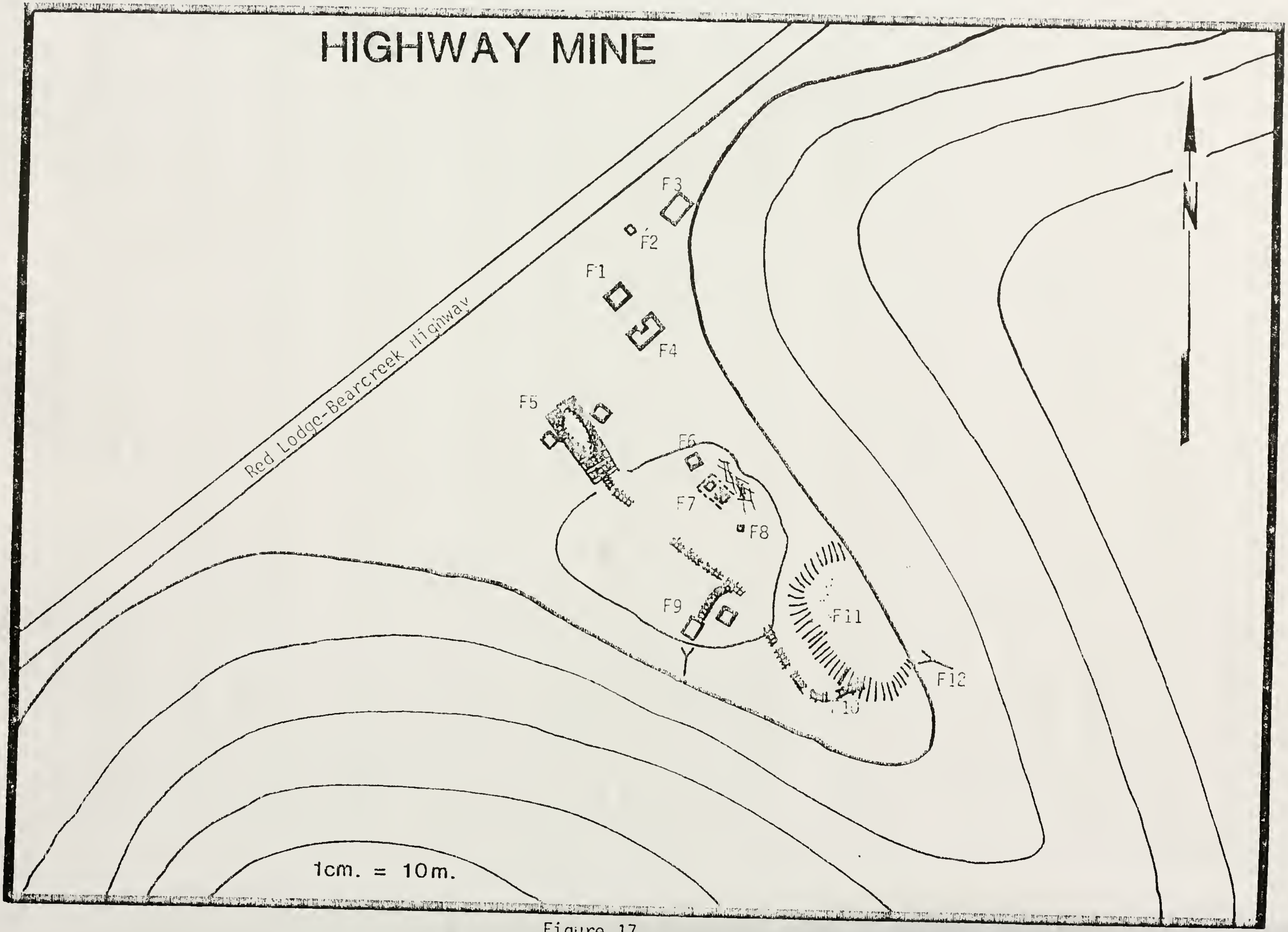

HIGHWAY MINE
N
Red Lodge-Bearcreek Highway
F3
F2
F1
F4
F5
F6
F7
F8
F9
F11
F10
F12
1cm. = 10m.

Figure 17

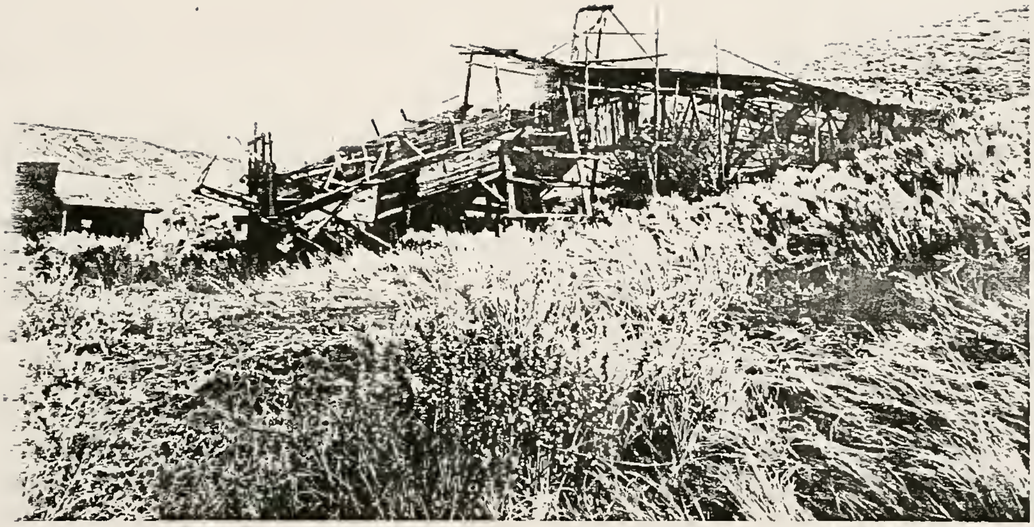


Figure 18. Wooden tipple and Highway Mine office (left background) (view to east).

Evaluation: Due to the fact that the mine was in operation until fairly recently, most of the mine complex remains intact and the physical integrity is good. It is a good example of the small-scale wagon mine, most of which have almost all disappeared.

National Register Statement: The site is less than 50 years old and therefore is not yet eligible for listing on the National Register of Historic Places.

Management Recommendations: Due to the opposition of the current owners of the site, the Department of State Lands does not have any immediate plans for reclamation of the mine. The site has been recorded, mapped and photographed and no further work on the site is recommended.

SITE DESCRIPTION

Site Identification: 24CB197 - The Burns Mine

Site Location: SE1/4 SW1/4 and SW1/4 SE1/4 of SE1/4 Section 6, T8S R21E
NE1/4 NW1/4 and NW1/4 NE1/4 of NE1/4 Section 7, T8S R21E

Elevation: 1475 m

Site Area: 4,500 m^2

Site Description: The site is located up a small side gully which runs northwest to the Bear Creek Coulee. The ruins of the mine are on the south facing hillside with a large coal slack dump covering the bottom of the gully (Figure 2). The rather barren area around the side has a sparse growth of range grasses, sagebrush and Rhus. The nearest water to the site is 500 m northwest in Bear Creek.

Structures and Cultural Materials: Most of the site is covered by a large coal waste dump which extends from the mine area down the gully for 100 m (Figure 19). The mine area is largely in ruins. The only intact structures are a small wood frame 8 x 8 m office building and a tin covered outhouse adjacent to it (features #2 and 3). The small wooden tipple is partially collapsed (Figure 20 - feature #1). It originally measured about 8 x 8 m. A small 1.5 x 3 m structure of concrete, stone and wood was built into the hillside north of the tipple and appears to have been a powder magazine (feature #4). Fifteen meters west of the powder magazine is the collapsed remains of what appears to have been an adit entrance portal. To the east of the tipple some 15 m, are the ruins of a small 1 x 1 m shack which may have been a ventilation shaft (feature #5). The totally collapsed remains of an unknown structure are located 10 m north of the office shack (feature #9). Also on the site was debris; the junked remains of a 1920s or 1930s vintage truck and next to the office shack are the remains of a coal loading machine similar to a Joy Mfg. Co. coal loader (Figure 21 - feature #6).

Historic Development: This small wagon mine was first developed by Robert "Bob" Burns during the 1920s. The land was leased from the Montana Coal and Iron Company and the operation appears typical of the small-scale coal mines which supplied coal to the local domestic market. The mine was reported to have closed in 1932 although some work may have been done later since the Joy Mfg. Co. type coal loader noted at the site was not invented until 1940 (Brophy 1982).

Evaluation: Most of the site is in ruins and it is unlikely that further work on the site would reveal any additional information on mining history and technology of this period.

National Register Statement: This site lacks physical integrity and does not appear to meet the eligibility requirements for listing on the National Register of Historic Places.

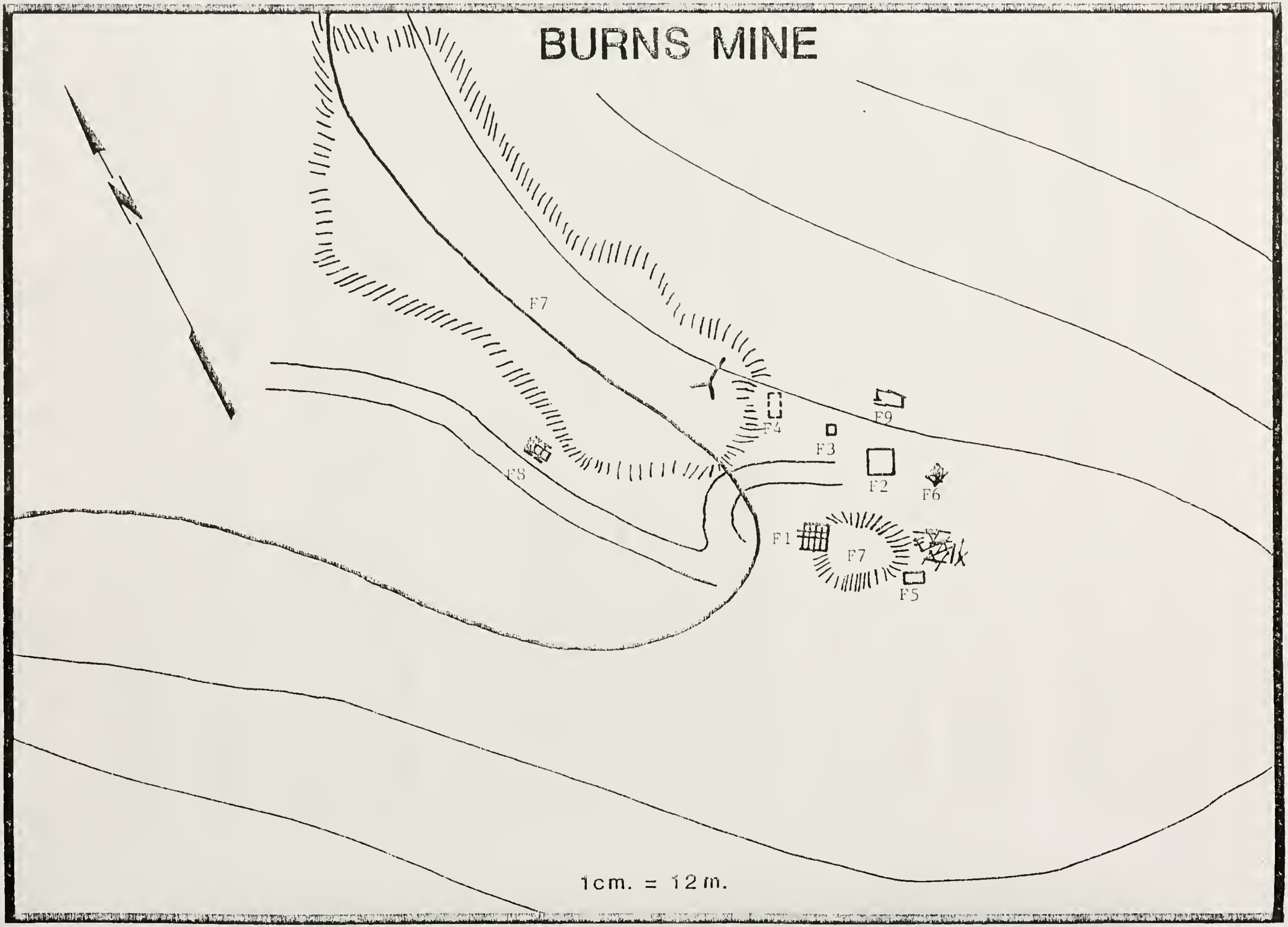


Figure 19

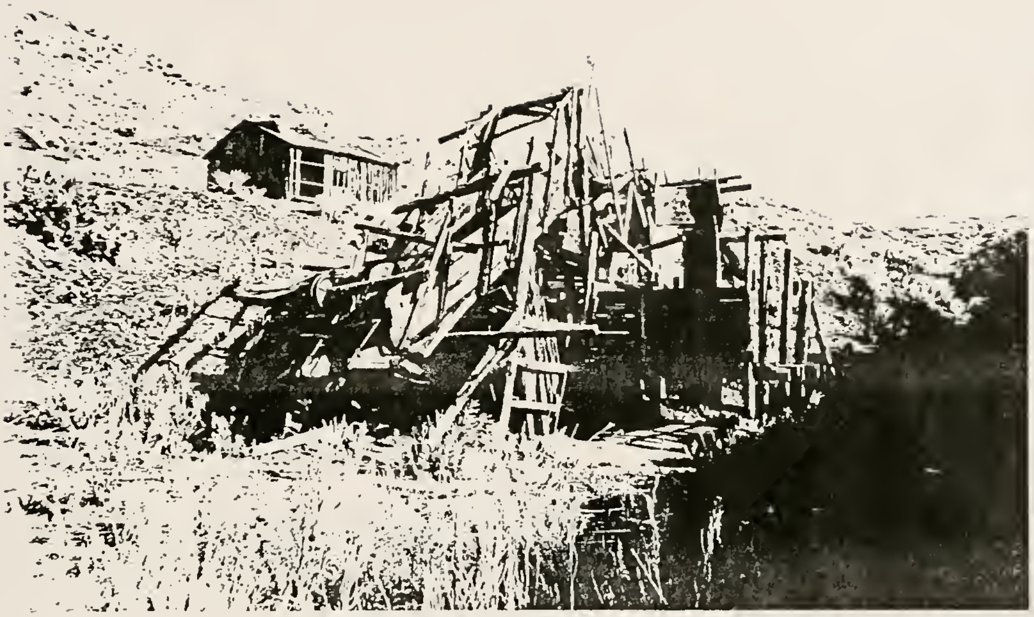


Figure 20. The Burns Mine Tipple (view to southeast).

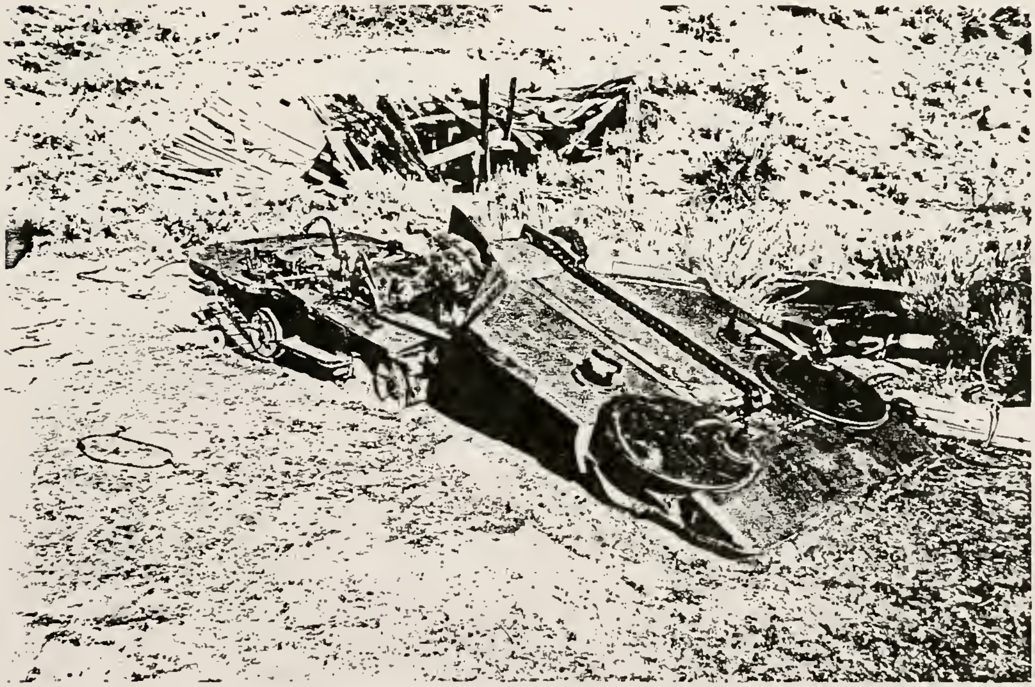


Figure 21. Coal loader (view to east).

Management Recommendations: The Department of State Lands considers the ruins of the Burns Mine to be a safety and health hazard and plans to remove dangerous structural remains and either remove or reclaim waste areas. Since the site does not appear to be eligibile for the NRHP, these plans would not constitute an adverse affect. The waste dumps are clearly a source of potential water pollution and it is recommended that the Department of State Lands be allowed to proceed with their plans on schedule. The site has been recorded, mapped and photographed and no further work is recommended.

SITE DESCRIPTION

Site Identification: 24CB196 - Smith Mine Complex

Site Location:
(I) NW1/4 Section 6
(II) SE1/4 SW1/4 and SW1/4 SE1/4 Section 6
(III) SE1/4 Section 7 and NW1/4 SW1/4, NW1/4 Section 8
(IV) NE1/4 SE1/4 Section 6
T8S R21E

Elevation: (I) 4,800 ft. - 1,463 m, (II) 4,800 ft. - 1,463 m,
(III) 4,700 ft. - 1,433 m, (IV) 4,700 ft. - 1,433 m

Site Area: (I) 180,000 m^2, (II) 64,000 m^2, (III) 340,000 m^2, (IV) 10,000 m^2

Site Description: The four sections of the Smith Mine complex are located within the drainages east of the town of Bearcreek (Figure 2). This is understandable since within the drainages the coal seams have been exposed providing the most practical access to the coal for mining purposes. Section I of the Smith complex is located along the north side of Scotch Coulee Creek (originally called Kicking Creek); section II is located on the south side of Bear Creek a short distance from where the creek joins Scotch Coulee; section III is located on both sides of Foster Gulch which flows northeast to the town of Bearcreek; and section IV is located a short distance south of Bear Creek at the mouth of a side gully which flows north into Bear Creek. The countryside around the sites consists of hilly arid grasslands with a sparse growth of rangegrasses, sagebrush, *Rhus*, cactus and occasional cottonwood trees along the stream bottoms.

Structures and Cultural Materials: (Section I) The Smith Mine is somewhat unusual in that it remains basically intact unlike most of the historic coal mines in Montana which have been either dismantled or destroyed. Most of the mining complex at the original mine location (called "The Smith No. 3") remains as it was when the mine closed in 1943 (Figures 22, 23, 24). The scope and complexity of the mining operation is the most salient impression given by this large collection of structures. Many of the structures at this location are similar in construction materials and appearance. Most of the structures were built around 1907 when the mine first went into production.

Feature #1, the main office building, is one of the few structures on the site which is not covered with corrugated metal siding. The L-shaped building is of simple wood frame construction and measures 19 x 18 x 8 m. The simple gable roof is covered with asphalt roofing material.

Most of the major buildings which were part of the coal processing operations (includes features #2, 3, 5, 7, 13, 14, 15) are similar in that all have corrugated metal siding and are constructed with a mixture of metal beams and wood. Feature #2 was the main shop used for repair and maintenance of the mine's basic equipment. The large square, gable roofed structure measures 11.5 x 35 m. Just west of the shop is a similar although smaller (5 x 7 m) building which appears to have been the payroll office since it was filled with cancelled payroll checks.

SMITH I
(SMITH NO. 3)

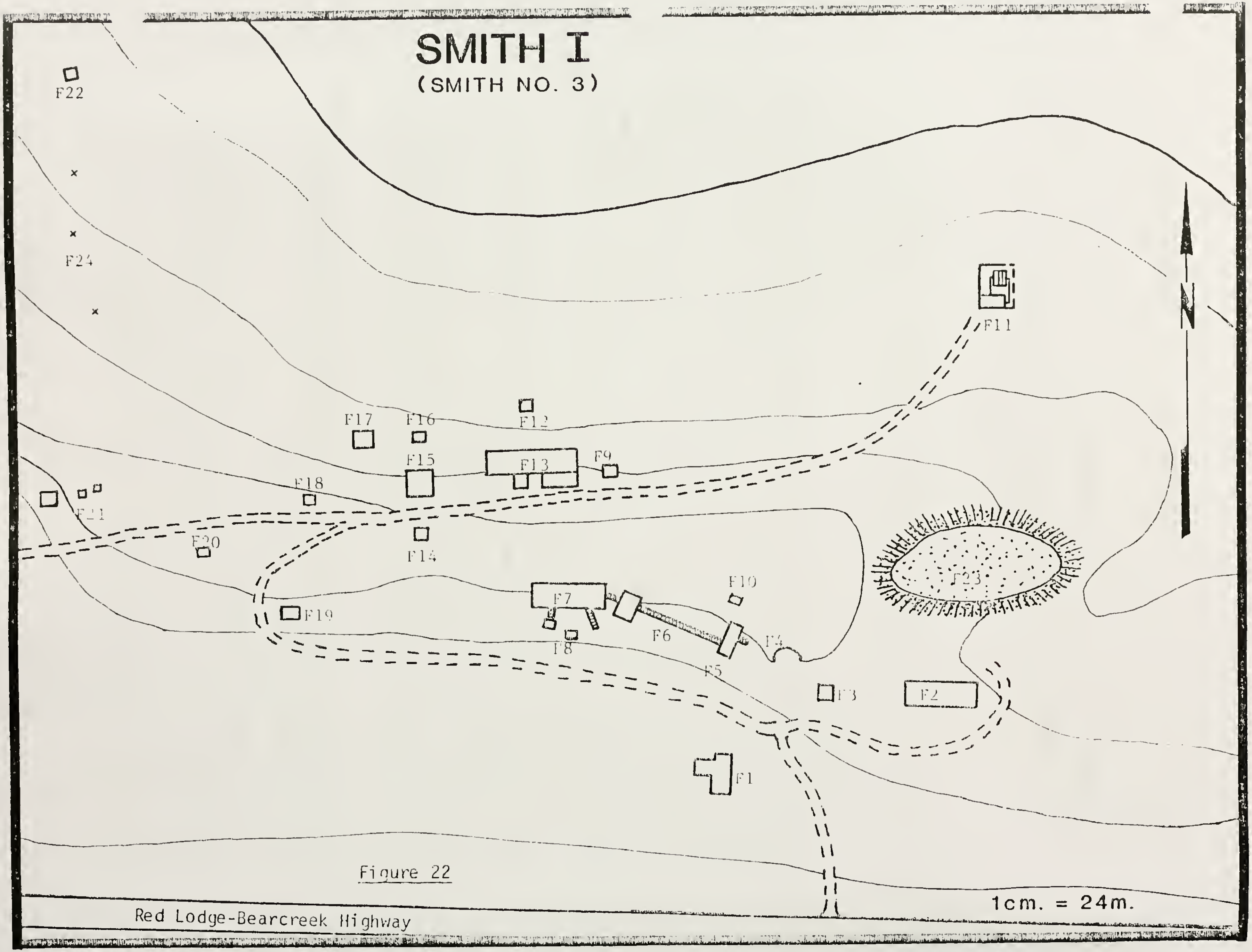


Figure 22

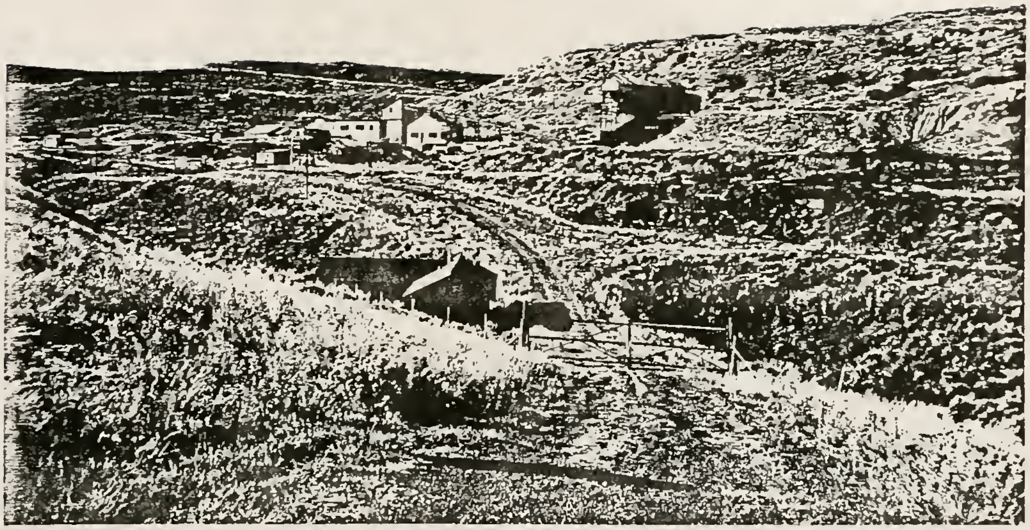


Figure 23. Front entrance to Smith No. 3 (view to northwest).

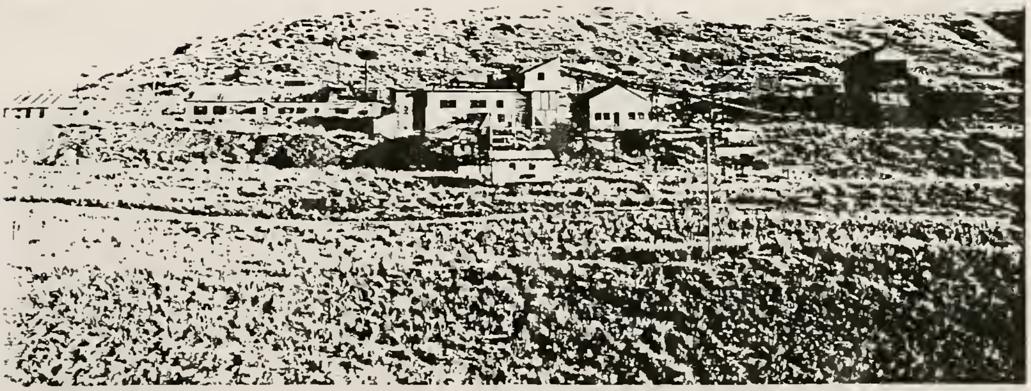


Figure 24. General view of mine complex (view to north).

Features #5, 6 and 7 are the basic components of the coal processing operation after it was brought out of the mine. The coal would have been hauled from the mine entrances at the base of the hillside on the north side of the site to the tipple (feature #5, Figure 25). The mine coal cars would have then been unloaded, usually by tipping them (hence the name "tipple"). The coal then would have been funneled to the bottom of the tipple where it would have fallen onto a 50 m long inclined conveyor belt (feature #6) which would have carried it to the top of the coal processing plant (feature #7, Figure 26). This large complex structure where the coal would have been cleaned, crushed and sorted consists of two separate parts at a slight angle to each other. The east section measures 10 x 13 m with the conveyor passing over the top of it. Concrete footings for heavy equipment are in the interior of the structure. The west section measures 15 x 37 m. On the outside of the north wall there is a vertical bucket conveyor and on the south side two horizonal loading ramps with hoppers project out from the structure.

Features #13, 14 and 15 are support buildings for the mining operation consisting of a 15 x 47 m geology/assay/shop building; a 3.5 x 4 m transformer building and a 11 x 19 m supplies/parts building. All are similarly constructed of metal and wood with metal gable-style roofs and corrugated metal siding.

Two structures (features #16 and 22) appear to have been powder magazines. Number 16 is located near the main complex of structures which is somewhat unusual. For obvious safety reasons they were usually located some distance from other structures as is #22.

The structure which housed the mine's boilers (feature #11) has been destroyed except for parts of the walls which were of stone and brick (Figure 27). A small wood shack remains at the south side of the ruined boiler structure. Parts of the boilers also remain in place. The entire boiler area measures 20 x 25 m.

The remaining features on the site consist of small sheds, slack dumps, debris, junked machinery and a small frame house, shed and garage which may have been associated with the mine although this could not be substantiated.

Two strip mines associated with the Smith Mine are located in the vicinity of section I of the Smith complex. One mine is found on the hill top northwest of the main mine buildings while the other is on top of the hill south of the mine complex across the highway and creek. Neither strip mine revealed any cultural materials other than the mines themselves.

Section II: This section of the Smith complex was originally the Lamport Mine which was one of the first mines developed in the area and consequently most of what remains on this site has either disappeared or is badly deteriorated (Figure 28). The Smith Mine did not develop this area until after the 1943 disaster and then only on a limited scale.

Structures which appear to be associated with the development in the 1940s include features #4, 5, 11, 12, 13, 14, 15 and 16. Features #4 and 5 are a metal water tank 4 m in diameter and a small concrete pump house.

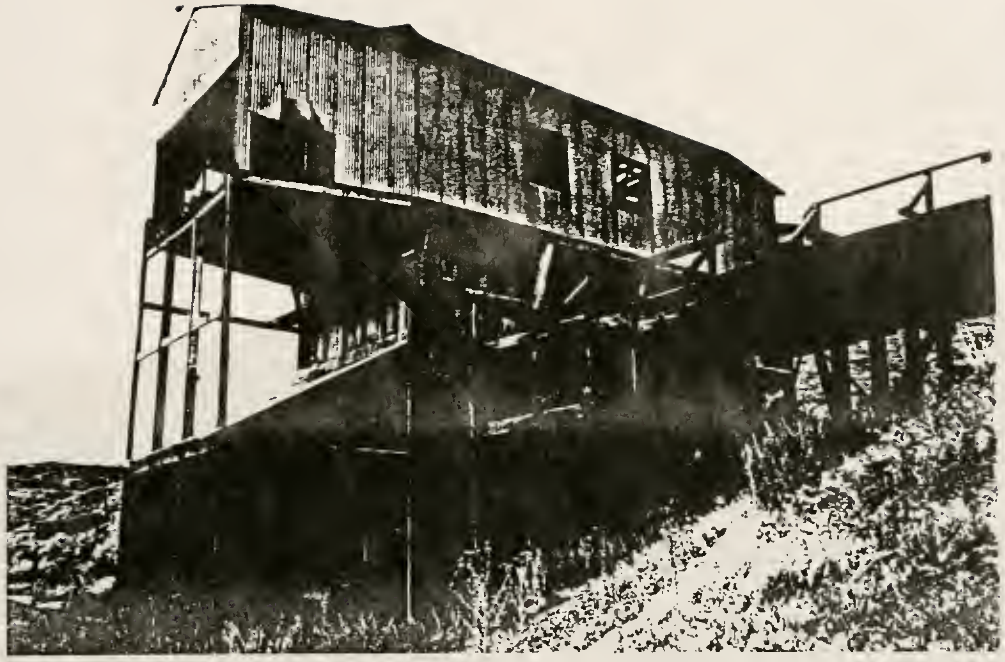


Figure 25. Smith No. 3 tipple (view to northwest).

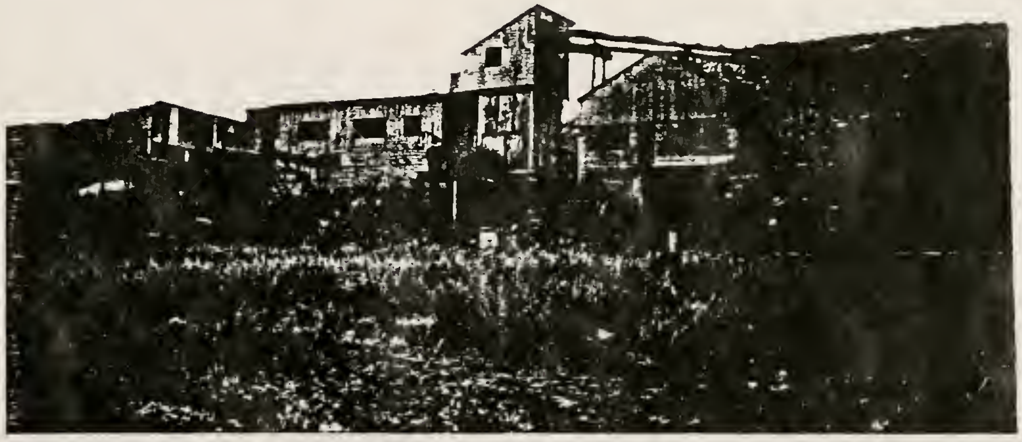


Figure 26. Coal processing complex (view to north).

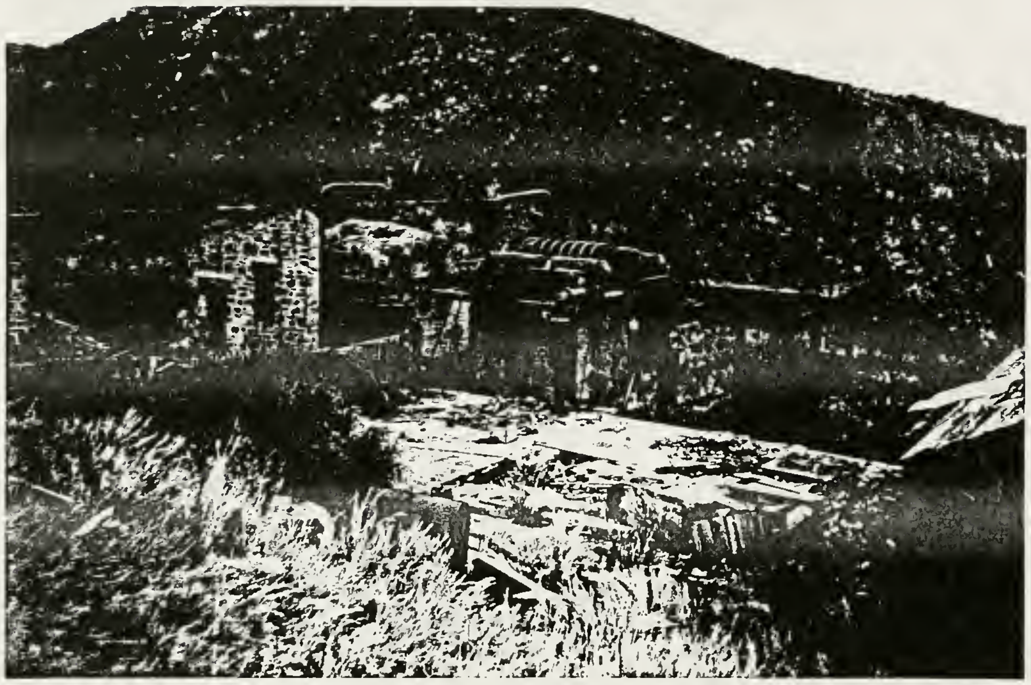


Figure 27. Remains of the boiler plant (view to northeast).

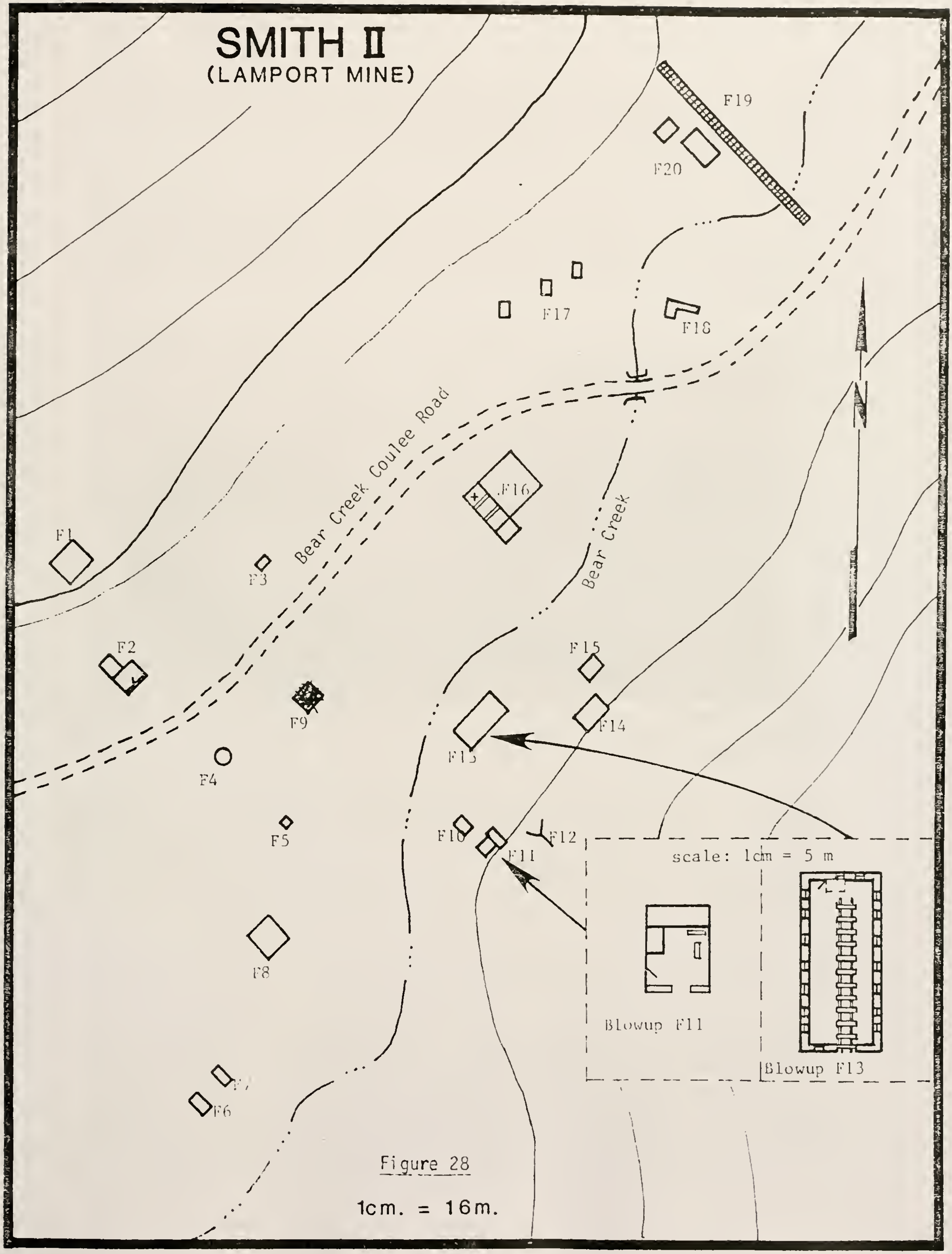

SMITH II
(LAMPORT MINE)
F19
F20
F17
F18
Bear Creek Coulee Road
F16
Bear Creek
F1
F3
F2
F9
F4
F5
F15
F14
F13
F10
F11
F12
F8
F7
F6
scale: 1cm = 5 m
Blowup F11
Blowup F13
1cm. = 16m.

Figure 28

Adjacent to the mine entrance portal (feature #12) is a concrete structure (feature #11) measuring 6 x 8 m which appears to have been a fan housing for mine ventilation. On the northeast side of the structure there is a wood box covering for the ventilation shaft.

The major structure remaining on the site is feature #13, the tipple. The 8 x 17 m building is constructed of concrete with a corrugated metal roof and gable ends. Seven windows line the long walls while the main entrance is located at the southwest end (Figure 29). Railroad tracks run through the center of the building and the coal cars were unloaded through the floor to the lower level.

Northeast of the tipple is a concrete 6 x 10 m electric power building (feature #14). A small wooden cupola for ventilation is on the top of the building (Figure 29). A few meters north of the power station is a small wood frame structure which rests on a concrete base (feature #15). The 5 x 6 m building's siding has been torn off although the walls and roof remain. It appears that the structure was used as a blacksmith shop or small repair shop. Some 70 m north of the tipple, adjacent to the road, is a large (8 x 22 m) concrete foundation (feature #16) which may have been associated with the Smith Mine operation of the 1940s. A large electric motor remains in place at one corner of the foundation. Nothing remains of the original structure whose function is unknown.

The remaining features on the site appear to date back to the original Lamport Mine. Features #1, 2 and 3 consist of a wood frame barn, house and collapsed shack. These appear to date from the pre-World War One era although it is not known if they were directly associated with the Lamport Mine. The small stone foundation and dugout (features #6 and 7) at the south end of the site; the partially collapsed frame house (feature #8); and the small stone structure with a log top and wood roof are all located along the stream. These appear to have been associated with the original Lamport Mine and were probably used by George Lamport himself when he first developed the mine.

Some 350 m down the coulee from the mine entrance, located west of the road, there are a miscellaneous group of features which also appear to be associated with the original mining operation. Feature #17 consists of three dugouts on the hillside west of the stream. Feature #18 is a concrete foundation of unknown purpose. A wooden loading trestle 75 m long (feature #19) crosses Bear Creek to the hillside west of the stream. Adjacent to the trestle is a small stone building (feature #20) whose original purpose is unknown.

Other features on the site consist of miscellaneous debris, coal waste and one mine coal car located near the mine entrance.

Section III: The Foster Gulch section of the Smith Complex has deteriorated although a few structures remain intact (Figure 30). The major standing structures within the gulch are the machine shop (feature #8) and the "dry" building (feature #13; Figure 31). Both structures are similar in construction and appearance to the main buidings at the original Smith Mine (Section I). Both have corrugated metal siding and metal roofs. The machine shop measures 12 x 38 m; is a single story high and has a simple gable roof. It appears the structure served as a general machine shop for repair and maintenance of mine equipment. The "dry" is similar in size to the machine shop, measuring 12 x 33 m

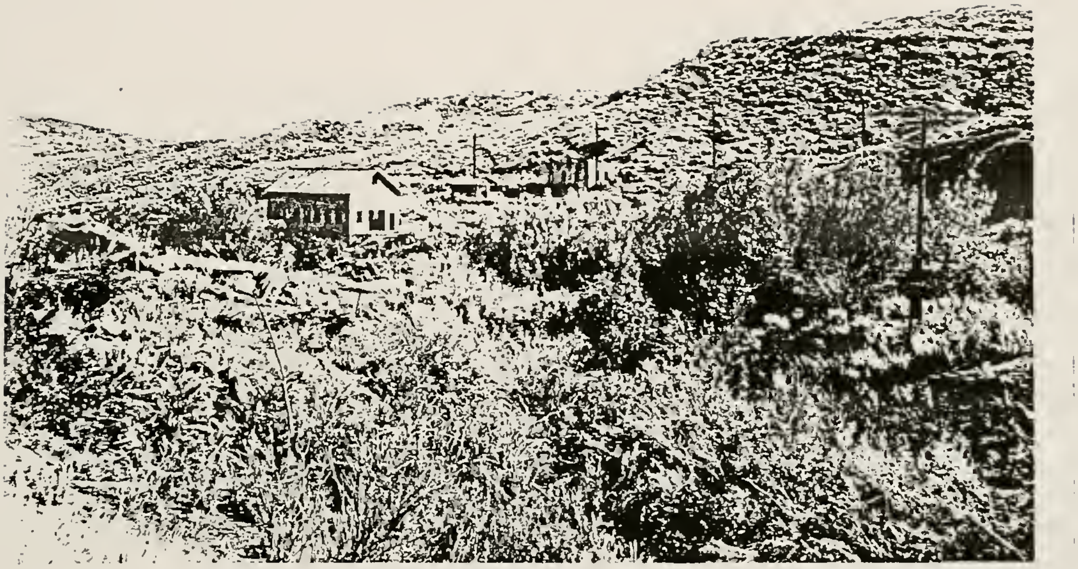


Figure 29. General view of Smith II showing the tipple and electric power station building (to right of tipple) (view to northeast).

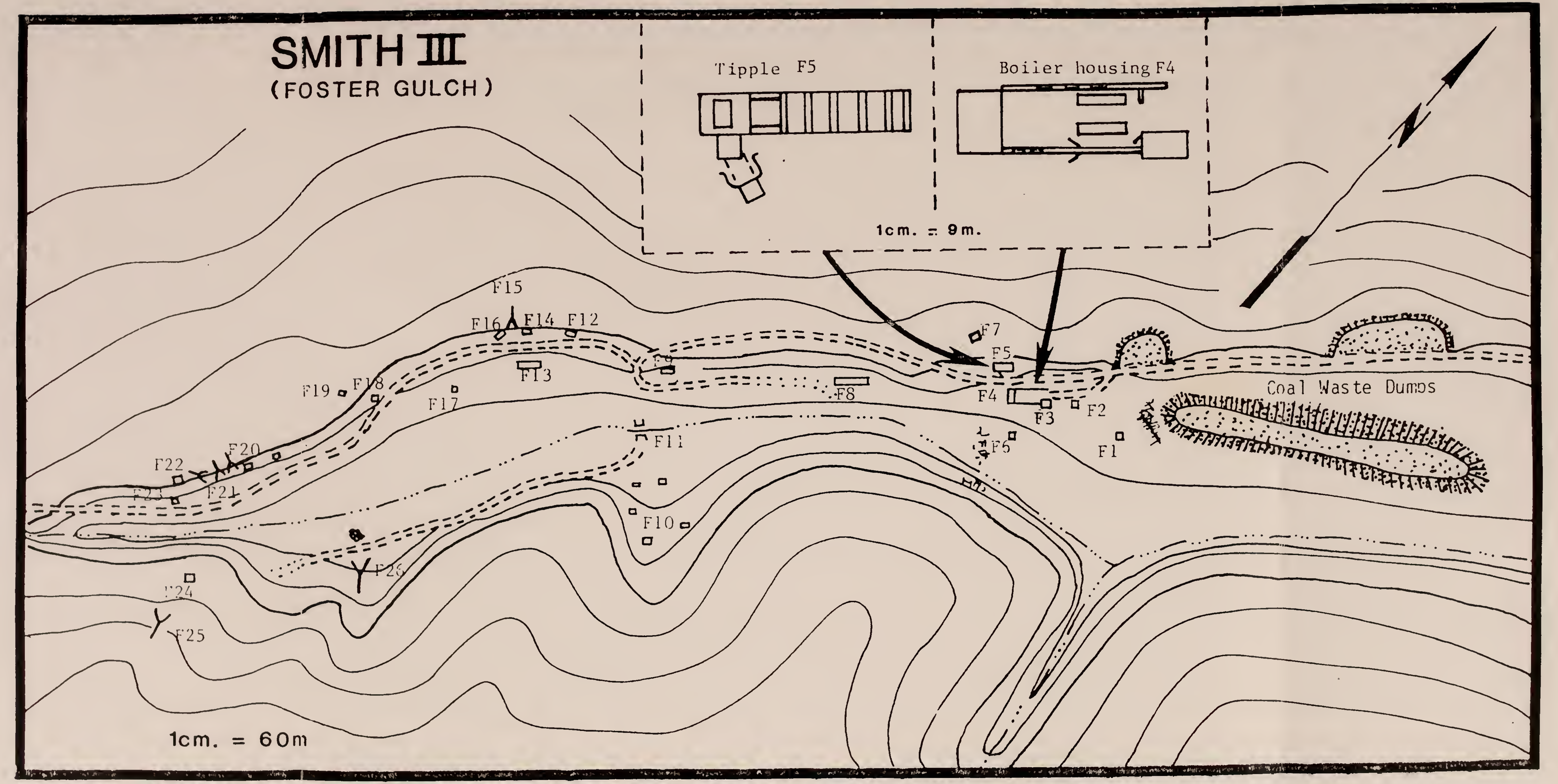

SMITH III
(FOSTER GULCH)
Tipple F5
Boiler housing F4
1cm. = 9m.
F15
F16
F14
F12
F7
F5
F9
F13
F8
F4
F3
F2
F1
F19
F18
F17
F11
F6
F22
F20
F21
F23
F10
F26
F24
F25
Coal Waste Dumps
1cm. = 60m

Figure 30

but is two stories high and has a combination gable and shed-style metal roof. The structure housed the miner's showers and locker room where their wet mining clothes could be hung to dry (thus the name "dry") and it also appears that part of the building served as an office for mining operations.

The boiler housing (features #3 and 4) and the tipple complex (feature #5) are unfortunately in ruins (Figure 32). The boiler housing, even in ruins, is an imposing concrete structure measuring 10 x 36 m with a round vault-like metal roof approximately 15 m high. The tipple is almost totally in ruins but appears to have originally measured about 8 x 10 m with a wood beam trestle running 40 m to the northeast (Figure 32). The remnants of a conveyor are located at the bottom level of the structure and extend to the east towards the boiler housing. The structure was originally constructed of concrete, wood and iron beams.

A few meters west of the tipple is a small (7 x 9 m) stone house (feature #7) which may have served as the house for the mine supervisor. The ruins of a somewhat similar structure (feature #16) are located across the road from the "dry". Only the stone walls (measuring 8 x 10 m) remain of this structure which served originally as the main power station for the mine. Some of the electric switches and panels remain on the inside walls.

One brick and one concrete structure are found on the site. Feature #18 is a small 1.5 x 2 m brick structure with a large 0.8 m diameter metal pipe protruding from the north side where an open adit entrance is located. The structure appears to have been a fan housing for mine ventilation. The concrete structure (feature #22) is located at the upper end of the gulch adjacent to three adit openings and measures 3 x 4 m. Its original function is unknown.

On the east side of the gulch across from the machine shop and the "dry" are four small shacks and a dugout (feature #10) which most likely served as dwellings for miners.

The remaining features on the site consist of small, non-descript wood and/or tin shacks of unknown purpose (features #2, 6, 9, 14, 17, 19, 20 and 23); two wood 3 x 4 m coal bins (features #1 and 12); numerous adit entances (features #15, 21, 25 and 26); a junked truck; a bridge foundation (feature #11); and miscellaneous debris and coal waste dumps.

Starting at the south end of the site are two strip mines, one extending eastward while the other extends northeast along the hill top on the north side of the coulee. Other than the mines themselves, no evidence of any cultural materials was observed in these strip mines.

Section IV: This small prospect adit contains very little cultural material relating to the mining activities (Figure 3). Two structures are at the bottom of the gully consisting of a wood frame house (feature #1) measuring 5 x 8 m and a tin sheet covered wood frame garage (feature #2) measuring 3.5 x 4 m. It is unlikely that either of these structures were related to the mining activities. The major site features are the two adit entrances (feature #3; Figure 34). A coal waste dump extends down the hill in front of the adits. Another waste dump (feature #4) is found up the gully about 100 m from the highway. A sparse scatter of lumber was found around this slack dump. Feature #5 consists of a thin scatter of coal slack near the top of the gully. No other debris or

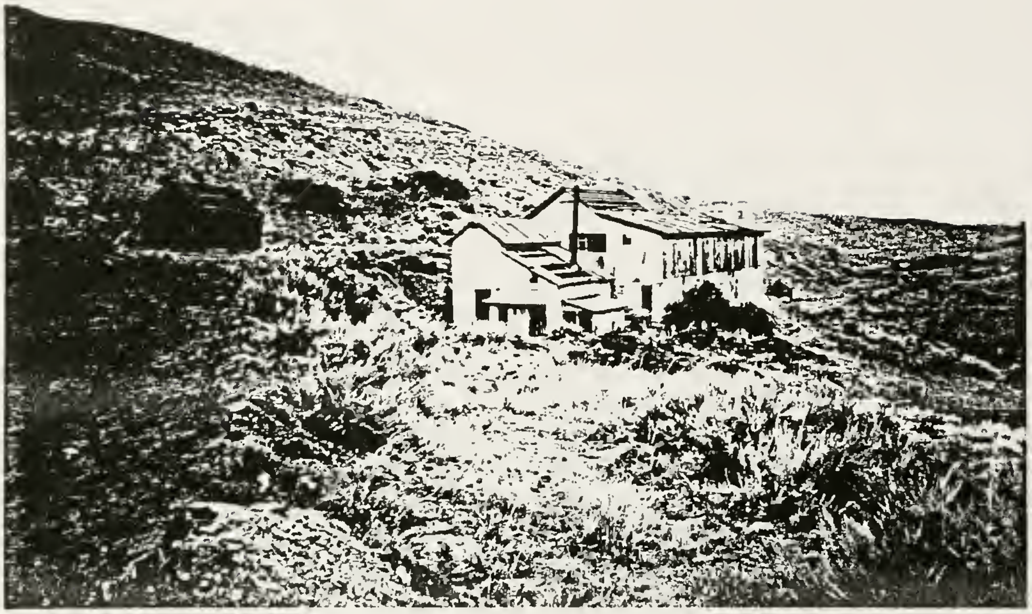


Figure 31. The "Dry" in the Foster Gulch (view to northeast).

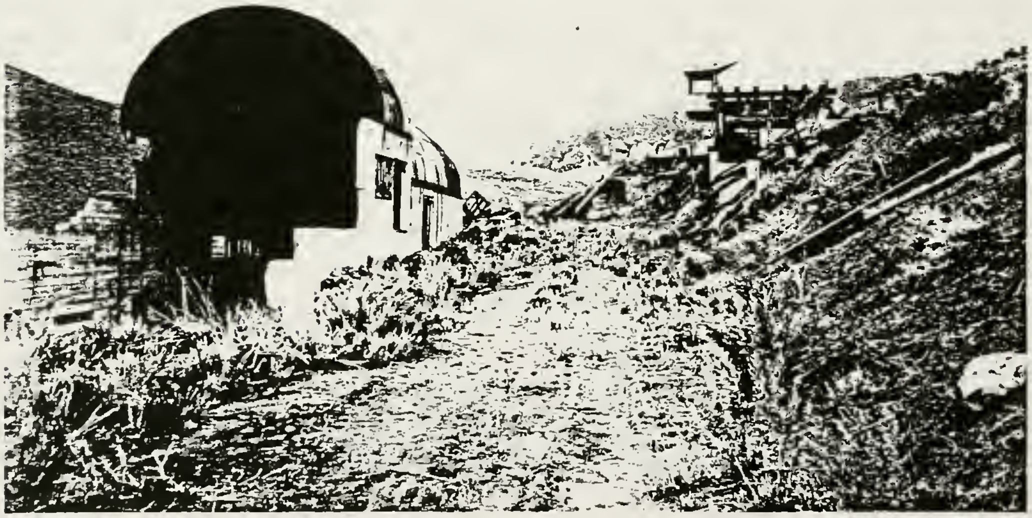
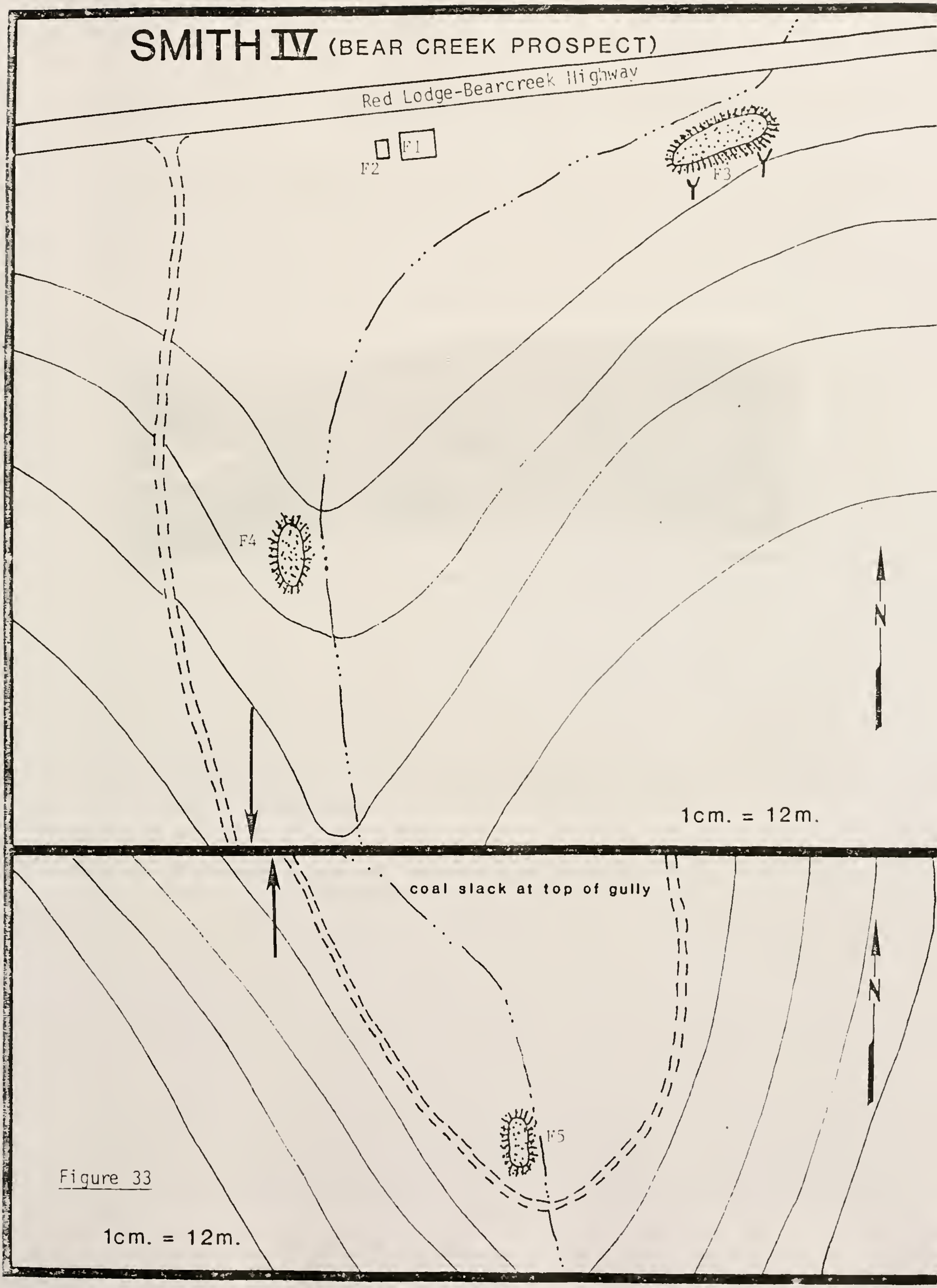


Figure 32. Boiler housing (left) and tipple (right) (view to southwest).



SMITH IV (BEAR CREEK PROSPECT)

Figure 33

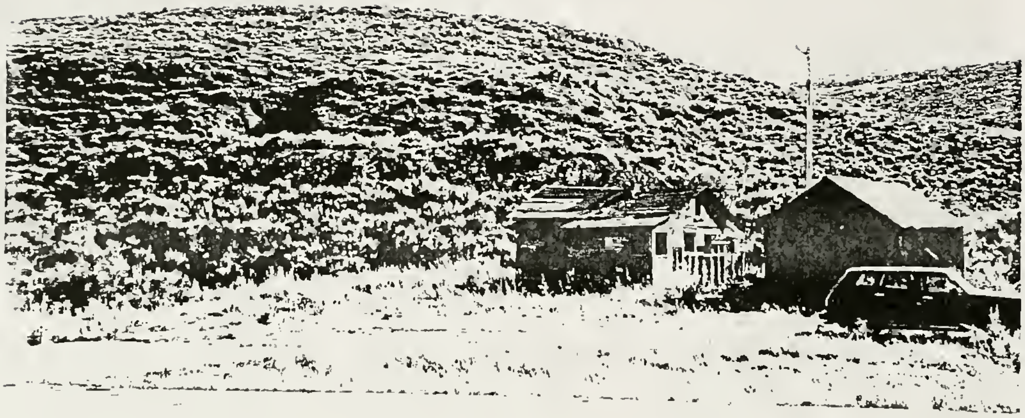


Figure 34. Structures and adits (on hillside left center) at Smith IV (view to south).

cultural materials were observed near this feature which could very likely be a natural coal outcropping. No other cultural materials were observed elsewhere on the site.

Historical Development: There are differing accounts as to the beginnings of the Smith Mine. Apparently the first development was begun around 1900 by the Montana Fuel and Iron Company (soon to be changed to the "Montana Coal and Iron Company") owned by George T. Lamport and Elijah Smith (Kuhlman 1972; Morgan 1966). Production was on a small scale since the wagon loads of coal had to be hauled over the hill to Red Lodge for shipment, although one account (Darton 1907) claimed that production amounted to 6,000 tons a year.

The completion of the Yellowstone Park Railroad to the Bear Creek District in 1906 made possible the development of the Bear Creek mines on a large commerical scale. By 1907 the Montana Coal and Iron Company's mine on Scotch Coulee (now called "The No. 3 Smith Mine") was ideally located on a spur of the Yellowstone Park Railroad. The mine had extended a main gangway and air course for nearly a thousand feet toward the northwest. Two entries ran east and had a total of 19 rooms. The mine was equipped with a tipple, box-car loader, shops and other buildings. Forty miners and 15 outside men were employed by the company which produced 18,000 tons of coal during the year for sale to towns along the Northern Pacific Railway (Woodruff 1908). During the next year production was up to 21,810 tons, improvements were made in the ventilation and the mine was reported to be safe and in good condition (Rowe 1909).

The mine continued to expand and with the large increase in demand for coal caused by World War One, the Montana Coal and Iron Company bought up a mine in Foster Gulch from a man named Flaherty and began development in that area during 1917. Eventually the underground workings from the Smith No. 3 and the Foster Gulch mines were connected making it one of the most extensive underground workings in the area. The Montana Coal and Iron Company's Foster Gulch mines operated until 1953 when the MC&I closed down. Following the closure, part of the Foster Gulch workings were leased for mining of domestic coal by Sam Carpenter and John Reed but in 1957 the last mines in the gulch were closed for good (Morgan 1966; Zupan 1979; Brophy 1982).

The Smith mines were steady producers during the inter-war years and were typical of numerous other coal mines throughout Montana. There were problems in the mine, however, although these were probably not uncommon to other mines. Ironically, in light of what was to happen, the main problem at the Smith No. was water. Underground springs and streams resulted in a large, constant flow of water into the mine which required large water pumps to work continuously to keep the mine dry. Sam Alexander - a miner at the Smith No. 3 - told a New Years' Eve gathering one wintery night: "We're all going to get it one of these times, caught like rats in a trap." Alexander would die in the Smith but not by water. His headstone - which for some reason was never used at his grave - is still located at the Highway Mine (24CB195) (Kuhlman:10 n.d.).

The Smith No. 3 also had a reputation as a "gassy" mine yet safety precautions were ignored during the rush to increase production during the early years of World War Two. Electric wires were strung on wet timbers, rescue equipment was inadequate and miners continued to use open-flame lamps and smoke underground even though gas had been reported in the mine almost daily during 1942 (Morgan 1966).

On Saturday morning, February 27, 1943, a full day shift of 77 men had gone into the mine. No one wanted to miss a Saturday shift since they were paid time-and-a-half wages. Tony Planichek, who was working above ground that morning, remembered seeing a dust cloud rise from the mine at about 9:30 but without any sound. He recalled running to the mine office where the mine manager tried to call underground but the other end of the phone was dead. At that point - later investigations would show - 30 of the miners were already dead, killed instantly by the methane explosion probably touched off by a miner's open-flame lamp. The remaining 44 victims were killed shortly after by the concusion from the blast or from the resulting gas. A few lasted for an hour or so before being overcome by the gas, some leaving poignant messages like Emil Anderson who wrote: "Its 5 minutes pass 11 o'clock Agnes and children I'm sorry we had to go like this God bless you all Emil with lots of love." And "Goodbye wifes and daughters we died an easy death. Love from us both Be good. Walter J. Johnny S:" which was found next to the bodies of Walter Joki and John Sudar. There were only three survivors from the 77 men who went down in the mine that Saturday morning making the mine disaster the worse coal mining accident in Montana history (Planichek 1982; Kuhlman:17 n.d.; Morgan 1966).

The Smith No. 3 never reopened after the tragedy although the Montana Coal and Iron Company did continue to work the Foster Gulch mines. The company also opened up access to the #2 seam through an old mine located a short distance up Bear Creek Coulee at the south center of section 6. This mine was first developed by George Lamport in 1897 and was the first commerical coal mine in the Bear Creek area (Lamport was also the founder of the town of Bearcreek). This second Smith mine (also called "The No. 4 Coulee Mine") operated for only a few years after the Smith disaster and was never a large producer (Planichek 1982).

The Montana Coal and Iron Company also opened the small prospect mine (Section IV) in southeast quarter of section six but the mine was never developed to any extent. The company also attempted to develop strip mines in the east half of section 6 and at the upper end of Foster Gulch but these also never produced any great amounts of coal and the company finally shut down the last of its operations in 1953 (Planichek 1982).

Evaluation: The original Smith No. 3 Mine (section I) is somewhat unique in that it is basically intact. Most historic underground coal mines throughout the region were torn down or destroyed soon after they closed down. The basic integrity of the site has not been greatly impaired although the structures on site are beginning to deteriorate due to weathering and vandalism. None of the structures exhibit any distinctive architectural features; however, the entire complex exhibits the basic technology of undergound coal mining during the first half of the Twentieth Century.

The other segments of the Smith complex (sections II, III and IV) have been largely destroyed with only a few structures remaining from the period of active mining. The remaining standing structures do not have any distinctive architectural characteristics. The site integrity of these sections has been lost although, for historical research purposes, they remain as part of the overall operation of the Montana Coal and Iron Company's Smith Mine Complex. It is unlikely that further work at the Foster Gulch or Bear Creek areas of the Smith Complex would reveal further information.

National Register Statement: The original Smith No. 3 Mine would be eligible for listing on the National Register of Historic Places under criteria a, c and d. Not only is the mining complex still intact, it is also the site of an important historical event: the Smith Mine explosion of 1943 which claimed 74 lives and remains the worst coal mine disaster in Montana history.

Management Recommendations: The Department of State Lands plans to remove or reclaim waste areas; close open adits and possibly remove structures which might be determined as hazardous. The waste areas are a serious source of water pollution and thus a threat to public health and should be removed. The waste areas are a peripheral element to the site integrity; their visual intrusion is an aesthetic eyesore and their removal should be an acceptable loss. Open adits clearly constitute a serious hazard to public safety which should take precedence over any other considerations of site integrity. If any structures are determined to be serious safety hazards and have to be removed, it is recommended they be photographed and recorded in detail as a mitigation measure.

SUMMARY AND RECOMMENDATIONS

The Red Lodge East Bench (24CB193); the Washoe (24CB194); the Burns (24CB197); the Highway (24CB195) and the Smith (24CB196) mines were all examined, recorded, mapped, photographed and the historic records researched. The East Bench, Washoe and the Burns mines have all been virtually eradicated and only traces remain of their original state. The integrity of these sites has been destroyed and they are not recommended as eligible for listing on the National Register of Historic Places; therefore, the reclamation plans of the Montana Department of State Lands for these sites should not constitute an adverse effect.

The Highway Mine is less than 50 years old and therefore is not yet eligible for listing on the National Register of Historic Places. Due to opposition of the current owners of the site, the DSL has no immediate plans for reclamation work on the site.

The original Smith No. 3 Mine on Scotch Coulee is eligible for nomination to the NRHP under criteria a, c, and d. The mine retains its integrity and also was the scene of a major historical event: the Smith Mine explosion which claimed 74 lives in 1943. The other three components of the Smith Mine (sections II, III and IV) lack physical integrity and would not be eligible for listing on the NRHP although for historical research purposes, they remain as part of the overall Smith Mine complex.

The open adits, coal waste dumps and certain hazardous structures pose an obvious threat to public health and safety and these considerations should override any benefits of historic preservation. It is recommended that the DSL plans be allowed to proceed on schedule. Structures at the Smith No. 3 which might be determined to be dangerous and in need of removal should be photographed and recorded in greater detail as a mitigation measure. Prehistoric sites 24CB401 and 24CB470 should be avoided if reclamation work is undertaken in proximity to them. If any unrecorded subsurface prehistoric or historic cultural materials are revealed during the reclamation work, GCM Services in Butte and the Montana Historic Preservation Office in Helena should be notified immediately.

References Cited

Brophy, James. R., Sr.
1982 Personal Interview, December 9 and 10.

Chadwick, Robert A.
1982 "Coal: Montana's prosaic Treasure", Montana: The Magazine of Western History 23(4): 18-31.

Coal production tables in the files of Meridian Land Company, Billings, Montana.

Darton, N. H.
1906 "The Coals of Carbon County, Montana", in: Contributions to Economic Geology. Part II. U.S.G.S. Bulletin 316, Washington D. C., 1907:189-190.

Evans, William B. and Robert L. Peterson
1970 "Decision at Colstrip". Pacific Northwest Quarterly. July: 129.

Fisher, C. A.
1904 Origin l mss. notebook, accession #2726. U.S. Geological Field Records, Denver.

1906 "Development of the Bear Creek Coal Fields, Montana:, in: Contributions to Economic Geology, 1905, U.S.G.S. Bulletin 285, Washington, D. C. 269-270.

History and Present Operations of the Northwestern Improvement Company
1905 Unpublished manuscript in file NWI 4.A.14.B, Archives and Manuscripts Division of the Minnesota Historical Society, St. Paul.

James, H.L.
1945 Chromite Deposits Near Red Lodge, Carbon County, Montana. Department of the Interior, United States Geological Survey, Bulletin 945-F. Goverment Printing Office, Washington, D.C.

Klein, Harry and Rose
1982 Personal Interview. October 13, Bearcreek, Montana.

Kuhlman, Fay
1972 Bearcreek, Montana. The Banner Press, Bearcreek.

n.d. The Darkest Hour: A Comprehensive Account of the Smith Mine Disaster. The Banner Press, Bearcreek.

Loendorf, Lawrence L.
1967 A preliminary archaeological survey of the Clark Fork River, Carbon County, Montana. Unpublished M.A. thesis, Department of Anthropology, University of Montana, Missoula.

Maynadier, Henry E.
1868 "Report...", in William F. Raynolds, "Exploration of the Yellowstone", *Senate Executive Document*, No. 77, 40th Congress, 1st Session.

Montana Fish and Game Commission
1975 *Montana Historic Preservation Plan with Historic Sites Compendium.* Recreation and Parks Division, Montana Department of Fish and Game.

Morgan, Thomas
1966 "History of Coal Mining in Montana", *Proceedings of the First Montana Coal Resources Symposium.* Montana Bureau of Mines and Geology, Special Publication No. 36, Butte, Montana.

Mulloy, William
1943 A prehistoric campsite near Red Lodge, Montana. *American Antiquity* 9(2).

The Northern Pacific Railroad and Montana's Mineral Lands
1965 *Pacific Historical Review* 34(3): 323-335.

Parsons, Floyd W.
1907 "The Operation of Coal Mines in Montana", *Engineering and Mining Journal*. December 7: 1071-1074.

Planichek, Tony
1982 Personal Interview. October 13. Bearcreek Montana.

The Rocky Fork Railroad and Coal Field
1889 *Northwest Magazine*. June: 11-12.

Rowe, Jesse Perry
1905 "The Montana Coal Fields", *Mining Magazine*. March: 241-251.

1906 *Montana Coal and Lignite Deposits*. University of Montana Bulletin No. 37, Geological Series No. 2.

1909 "The Coal-mining Industry of Montana", *The Engineering and Mining Journal*. April 24: 845-850.

Smalley, E. V.
1892 "Red Lodge, Montana: A New Coal Mining Town on the Eastern Side of the Rockies", *Northwest Magazine*. August: 20-24.

Topping, E. S.
1968 *Chronicles of the Yellowstone* (Robert Murray, editor). Ross and Haines, St. Paul.

United States Department of the Interior, Bureau of Land Management
1976 *Historic Sites Inventory and Evaluation of Nine Large Sample Tracts in Montana*. Part 4, Government Printing Office, Washington, D.C.

Woodruff, E. G.
1907 "Red Lodge Coal Field" original mss. notebook, Accession 110-A, L-12. U.S.G.S Field Files, Denver, Colorado

1908 "The Red Lodge Coal Field, Montana", The Coal Fields of North Dakota and Montana in 1907. Department of the Interior, United States Geological Survey, Bulletin No. 341. Government Printing Office, Washington, D.C.

Zupan, Shirley and Harry J. Owens
1979 Red Lodge: Saga of a Western Area. Frontier Press, Billings, Montana.

APPENDIX A:

Site Forms

SITE FORM NO. 1

GCM SERVICES INC.

P.O. BOX 3047
BUTTE, MONTANA 59702

Cultural Resource Inventory

1 Site Number

2. County Carbon

3 State Montana

4 Site Name Northwestern Improvement Company East Bench Mine

5 Other Names For Site originally called The Rocky Forks Coal Mine / also the Northern Pacific Coal Mine

6. City or Town Vicinity of
Red Lodge

7. Map Reference
USGS
Red Lodge East, Mont.
N4507.5-W10907.5/7.5
1969

8 Township & Range Number
T7S R20E

9 Section Number
E½ NE¼
E½ SE¼ Sect 27
SE¼ SE¼ sec. 22

10 Latitude
45° 10' 55"
45° - 11' 50"

11. Longitude
109° 14 25"

12. U.T.M. Reference

Zone	Easting	Northing
1 2	6 3 8 2 5 0	5 0 0 4 6 5 0

Surface Ownership:
15. Federal State Private

16 Mineral Ownership
Federal State Private
All Minerals
Coal Only

17 Project Name
Montana Department of State Lands - Abandoned Mines Project

18 National Register
On
Nominated
Determined Eligible
Recommended
Need Data
Not Eligible X

19 Site located by & Date
P. Anderson
10/13/82

20 This Record by & Date
P. Anderson
3/31/83

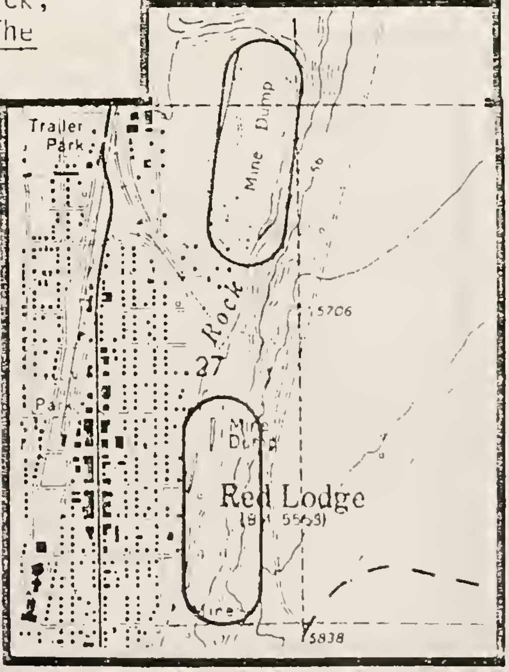
21 Revisions by & Date

22 Site Category
Historic X
Prehistoric
Other specify

23. Site Status
Survey X
Photo/map X
Tested
Excavated
Other specify
Comment

13 Publications
Zupan, Shirley & Harry Owens, Red Lodge: Saga of a Western Area. Carbon County Historical Society 1979. Chadwick, Robert, Coal: 'Montana's Prosaic Treasure" Montana The Magazine of Western History. Vol 23 #4 Autumn 1973

14 Narrative of site location and access to site
The site is located on the east side of Red Lodge and is accessible from the bridge which crosses Rock Creek in the city park and the road which runs along the east side of Rock Creek.



SITE FORM NO. 2

Northwestern Improvement Co.
East Bench Mine

SETTING AND CONDITION OF SITE

Site Name

Phytogeography

1. Elevation
1707 Meters 5600 Feet

2. Distance, direction and nature of nearest water source.
The site is adjacent to Rock Creek

3. Soil (color, character, depth)

4. Geographic land form/ topography character/ slope / site faces.
Stream bottom and steeply rising hill to the east.

5. General vegetative community
Stream Bottom

6. On-site vegetation
Rhus, range grasses, small pine trees cottonwoods

Site condition

7. Natural deterioration

Degree		Type
none		sheetwash
light		gully
moderate		wind erosion
heavy	X	animal disturb.
complete		natural weathering

8. Human Disturbance (real/potential)

Degree		Type	Distance From
light		buildings	
moderate	X	towers	
complete		roads	
unknown			

Comments: Most of the mining related structures have been dismantled or torn down.

9. Environmental/Economic threats to site

	Private development	X	Public works project
	Zoning		Mining
	Vandalism, deterioration		Other (specify)

Comments: The Montana Department of State Lands plans to close open adits and eliminate dumps and disturbed areas through landscaping or removal.

Site Name: Northwestern Improvement Co

HOMESTEAD/RANCH/FARM GENERAL FORM No.

---

1. General Description: (no. of buildings, general use, etc.)

(see attachment)

Key to site sketch map and individual feature/building forms.

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2. Historic Ownership:

(1) Rocky Fork Coal Company
Northwestern Improvement Co. (subsidiary
(2) Northern Pacific Railway Company)

(3) United States Vanadium Corporation
Chrome Mill - 1941-1951

3. Date of construction:
1887-1898

1889-1932

4. Use (present, original):

---

5. Names Associated with Title:

Name (last name first)	Dates(s)	Deed Book Ref.

6. Track Book Reference:

Name	Type of Entry HE, CE, DLE, other	Serial No.	Patent No.	Representation on GLO Plat

10. Noted events associated with property or with persons associated with property:
The Mine was the first major producing coal mines in the area. Two major disast occurred at the mine. Both were fires inside the mine. The first occurred on June 7, 1906 and claimed eight lives while the second happened on November 20, 1908 with nine fatalities.

Attachment (1. General Description: No. of buildings, general use, etc.)

Feature no.

1. Log loading ramp. This log retaining wall is at the end of a faint road running down from the prospect on the hillside to the north. It was most likely used for loading purposes.

2. Log bin. This small log bin's use is unknown.

3. Adit. The portal for a prospect drift into the No. 1 vein was located at this point. The drift was driven during the late 1920s or early 1930s by the Montana Coal and Iron Company.

4. Coal slack dump and debris. The coal slack dump has lumber debris scattered at the south end. The slack was from the operation of the Montana Coal and Iron Company's adit (feature #3).

5. Coal car. This junked coal mine car is on the south part of the slack dump.

6. Concrete foundations. The original function of these two small concrete slabs is unknown although they were most likely foundations for mine buildings.

7. Retaining walls. These three U-shaped 2.5 x 12 m concrete walls appear to have been part of the mine's boiler house based on the position indicated on the 1931 Northwestern Improvement Company's map of the mine complex.

8. Foundation. This small 3 x 3 m concrete foundation was for a building of unknown use.

9. Power Plant. The major standing structure remains on the site is this 12 x 40 m power plant. The two-story·high structure has metal siding (in part) with a simple gable style roof with four metal ventilator caps on the roof peak. The long sides of the building have seven windows with a door in the middle while the north/south ends have two windows and a door.

10. Fan housing. The concrete fan housing measures 8 x 18 m. The circular fans are still in place and measure three meters in diameter.

11. Adit. The adit entrance is located adjacent to the north side of the fan housing.

13,14,15,16, 17,18,19. Concrete foundations. These concrete foundations and footings extend from the top of the hill down to the edge of Rock Creek. They were all most likely associated with the Stearns-Rogers Company's chrome concentration mill which was built on this location in 1941. The mill burned down in 1951 and only these foundations remain.

20. Powder Magazine. This 3.5 x 13 m structure is built of bricks with a tin roof. There are no windows and two doors are found in the front with a small opening on the north side. The structure was probably a powder magazine for the coal mine.

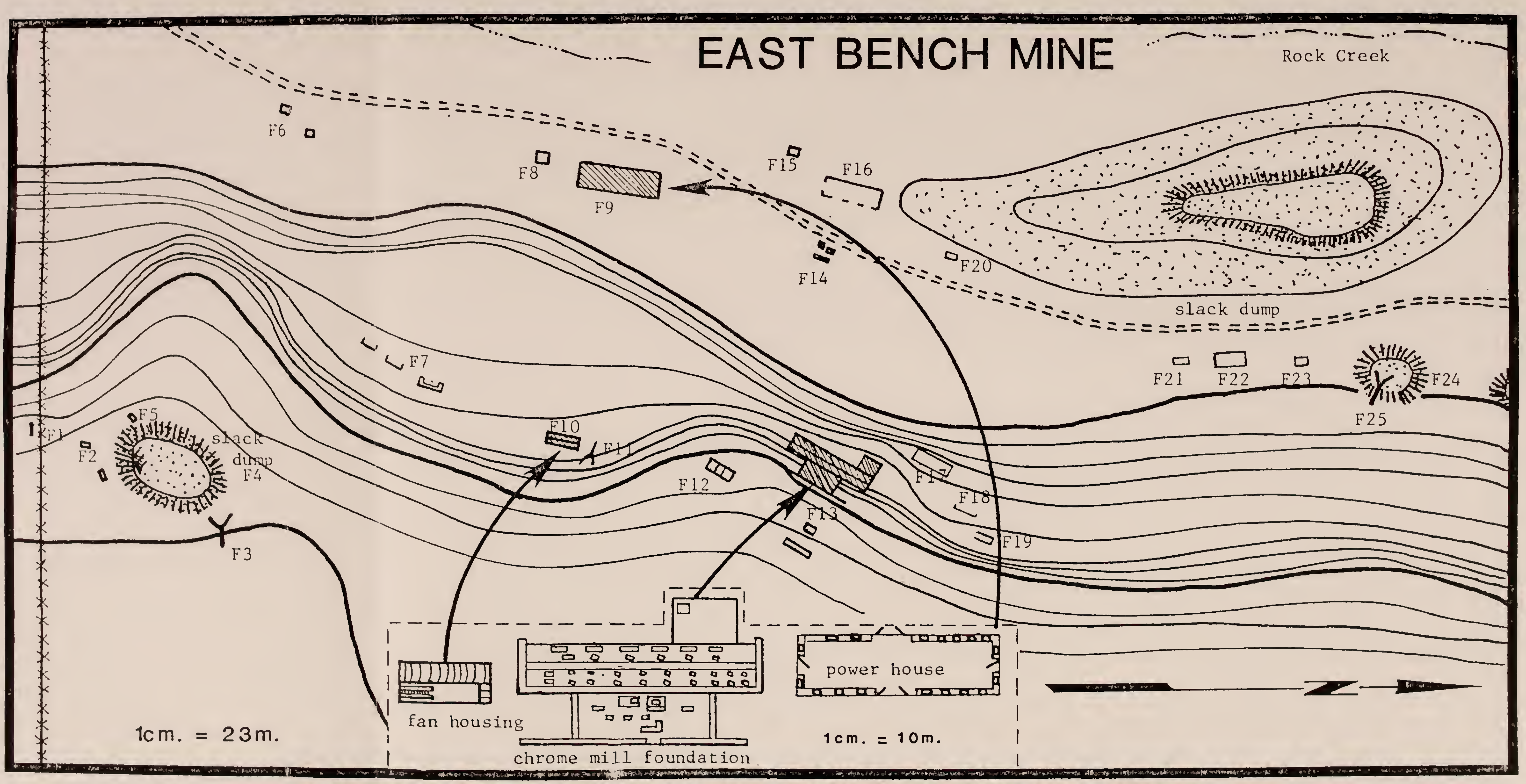
Attachment - 2

21 & 22. Concrete foundations. These two concrete foundations measuring 2 x 8 and 8.5 x 14 are located adjacent to the east side of the slack dump. it is not known whether they are associated with the coal mining operation or with the chrome mill. Their use is unknown.

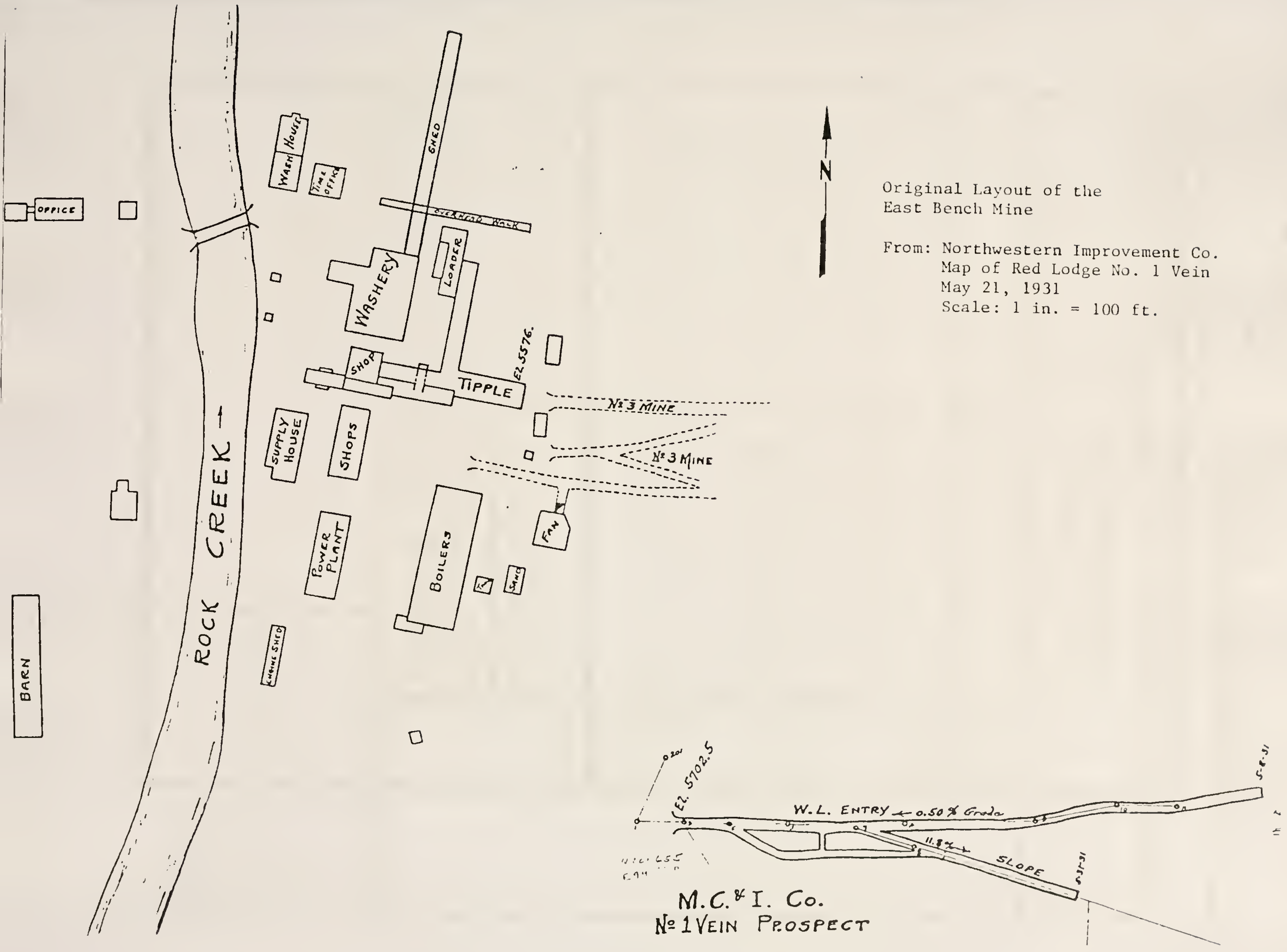
23. Log crib. This 2 x 7 m log crib's function is unknown.

24. Slack and debris. Lumber debris is scattered over this slack dump and the debris on the west side of the dump appears to have been a small tipple.

25. Adit. A closed adit entrance is located on the east side of the slack dump.



EAST BENCH MINE



Original Layout of the
East Bench Mine

From: Northwestern Improvement Co.
Map of Red Lodge No. 1 Vein
May 21, 1931
Scale: 1 in. = 100 ft.

CULTURAL RESOURCE FORM NO. 6

Site Name Northwestern Improvement Co.

1. Photos:

Accession	Description	Direction
1. proof #1 - photos #1-34		
2. proof #4 - photos #1-34		
3. proof #5 - photos #1-14		
4.		

2. National Register Statement:

The Northwestern Improvement Company's East Bench Mine was the area's largest coal mining operation and was perhaps the single most important factor in the growth and development of the town of Red Lodge. However, the site has been dismantled or has deteriorated to a point where little remains of the original mining operation. Only three structures remain from the once extensive mining complex. In addition, the integrity of the site has been compromised by the fact that a large chrome concentration mill was built on the site in 1941. This mill burned down in 1951 and thus a large part of the ruins found on the site belong to it rather than the coal mining complex. The site, therefore, lacks its original integrity and is not eligible for listing on the National Register of Historic Places.

3. Recommendations:

The site has been thoroughly researched, recorded, mapped and photographed and further work on the site would not reveal additional information. No further work on the site is recommended. The Department of State Lands plans to close the open adits and eliminate the coal slack dumps and other disturbed areas in the interest of public health and safety. It is recommended that they be allowed to proceed with their plans on schedule.

SITE FORM NO. 1

GCM SERVICES INC.

P.O. BOX 3047
BUTTE, MONTANA 59702

Cultural Resource Inventory

1. Site Number

2. County Carbon

3. State Montana

4. Site Name Washoe Copper Company Mine

5. Other Names For Site

6. City or Town Bearcreek Vicinity of X

7. Map Reference
USGS Red Lodge East, Mont.
N4507.5-W10907.5/7.5
1969

8. Township & Range Number T8S R20E

9. Section Number North ½ Sect. 1

10. Latitude 45° 09' 33-55"

11. Longitude 109° 11' 40"
109° 12' 50"

12. U T M Reference

Zone	Easting	Northing
	6 4 0 9 0 0	5 0 0 1 8 5 0
1 2	6 4 2 0 0 0	5 0 0 2 6 0 0

13. Publications
Parsons, Floyd W., "The Operation of Coal Mines in Montana" The Engineering and Mining Journal, Dec. 7, 1907, p.1071-1074. Leonard, A.G. et al., Coal Fields of North Dakota and Montana. U.S.G.S. Bulletin no. 341, 1907.

Surface Ownership:
15. Federal State Private

16. Mineral Ownership
Federal State Private
All Minerals
Coal Only

17. Project Name Montana Department of State Lands Abandoned Mines Project

18. National Register
On
Nominated
Determined Eligible
Recommended
Need Data
Not Eligible X

19. Site located by & Date P. Anderson 10/13/82

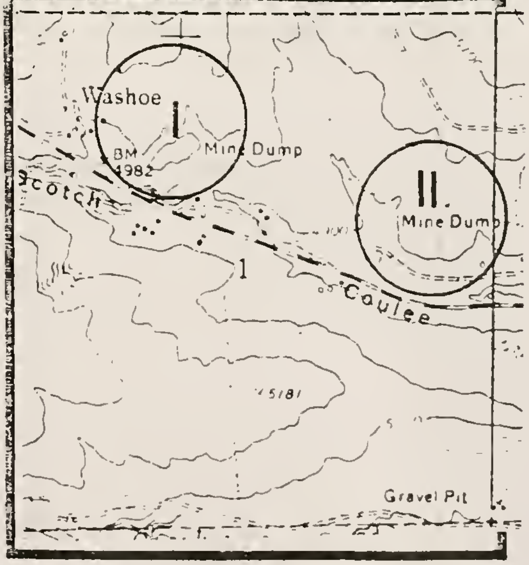
20. This Record by & Date P. Anderson 4/1/83

21. Revisions by & Date

22. Site Category
Historic X
Prehistoric
Other specify

23. Site Status
Survey X
Photo/map X
Tested
Excavated
Other specify
Comment.

14. Narrative of site location and access to site
The site is located on the north side of road between Red Lodge and Bearcreek over the north half of sec. 1 located 3 miles west of Bearcreek.



SITE FORM NO. 2

SETTING AND CONDITION OF SITE

Site Name Washoe Mine

Phytogeography

1. Elevation
1494 Meters 4900 Feet

2. Distance, direction and nature of nearest water source.
The site is adjacent to Scotch Coulee creek.

3. Soil (color, character, depth)

4. Geographic land form/ topography character/ slope / site faces:
Stream bottom with the site located on the low hills north of the creek which runs down the broad Scotch Coulee.

5. General vegetative community
Arid grasslands

6. On-site vegetation
Range grasses and sagebrush

Site condition

7. Natural deterioration

Degree
none
light
moderate
heavy
complete X

Type
sheetwash
gully
wind erosion
animal disturb.
natural weathering

8 Human Disturbance (real/potential)

Degree
light
moderate
complete X
unknown

Type
buildings
towers
roads

Distance From

Comments. The DSL will remove or reclaim the disturbed areas of the site.

9. Environmental/Economic threats to site
Private development
Zoning
Vandalism, deterioration
X Public works project
Mining
Other (specify)

Comments: The Montana Department of State Lands plans to eliminate dumps and disturbed areas through landscaping or removal.

Site Name: Washoe Mine

HOMESTEAD/RANCH/FARM GENERAL FORM No.

---

1. General Description: (no. of buildings, general use, etc.)
 (I) 1. concrete footings for the tipple
  2. concrete remains (13 x 18 m) of what may have been a hoist house
  3. a preformed concrete entrance portal with "Washoe Copper Co. Mine No. 2" cast into the top and two concrete slabs
  4. partially buried cable from feature #1 to #2
  5. large coal slack dump
 (II) 1. a brick building measuring 3 x 5 m - perhaps a powder magazine
  2. a stock shed, a stone foundation and a collapsed shack - it is not known if they were associated with the mine

Key to site sketch map and individual feature/building forms.

2. Historic Ownership:
(1) Washoe Copper Company (a subsidiary of the Amalgamated Copper Company)
(2)
(3)

3. Date of construction:

1906-1938

4. Use (present, original):

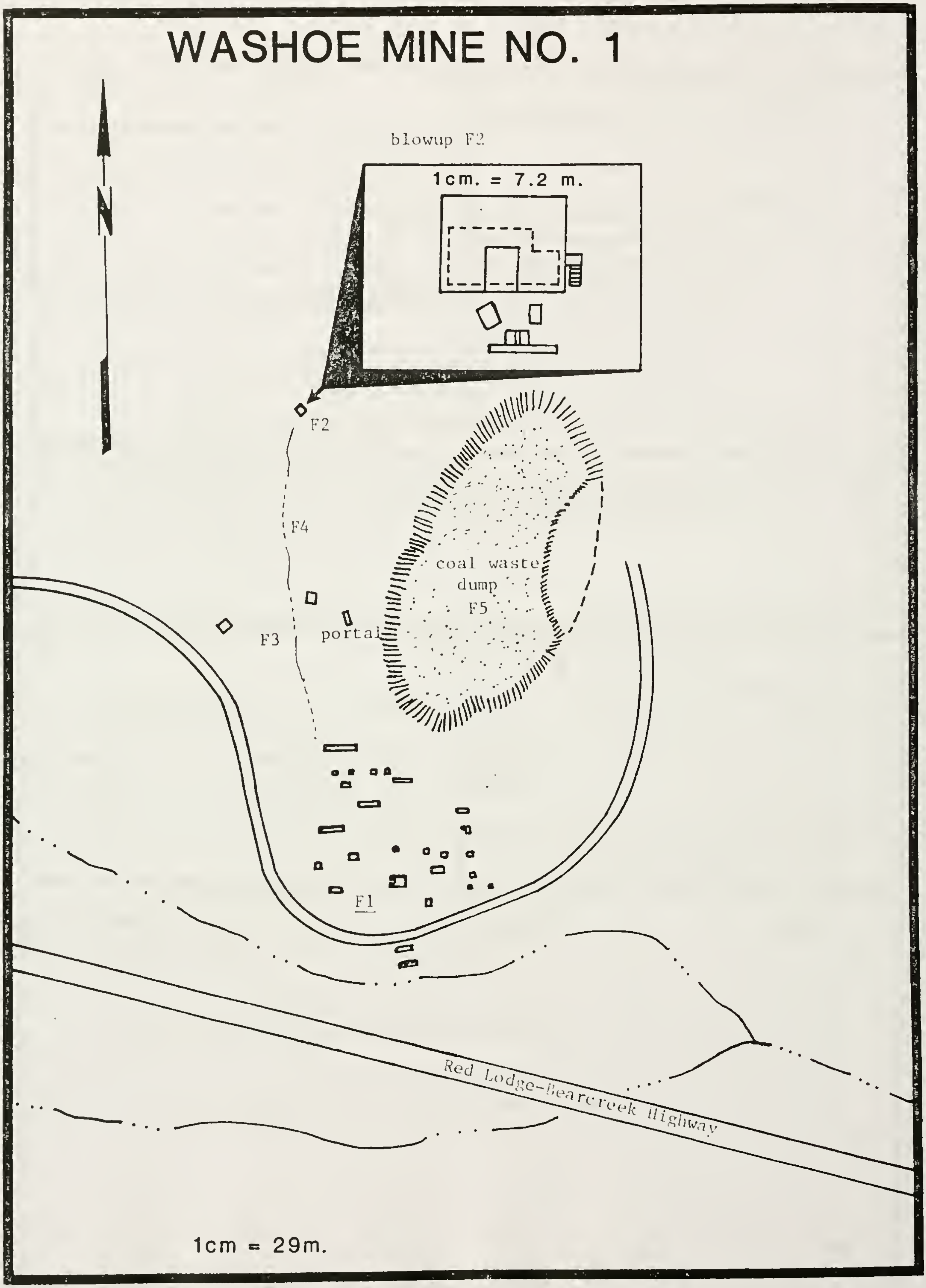
5. Names Associated with Title:

Name (last name first)	Dates(s)	Deed Book Ref.

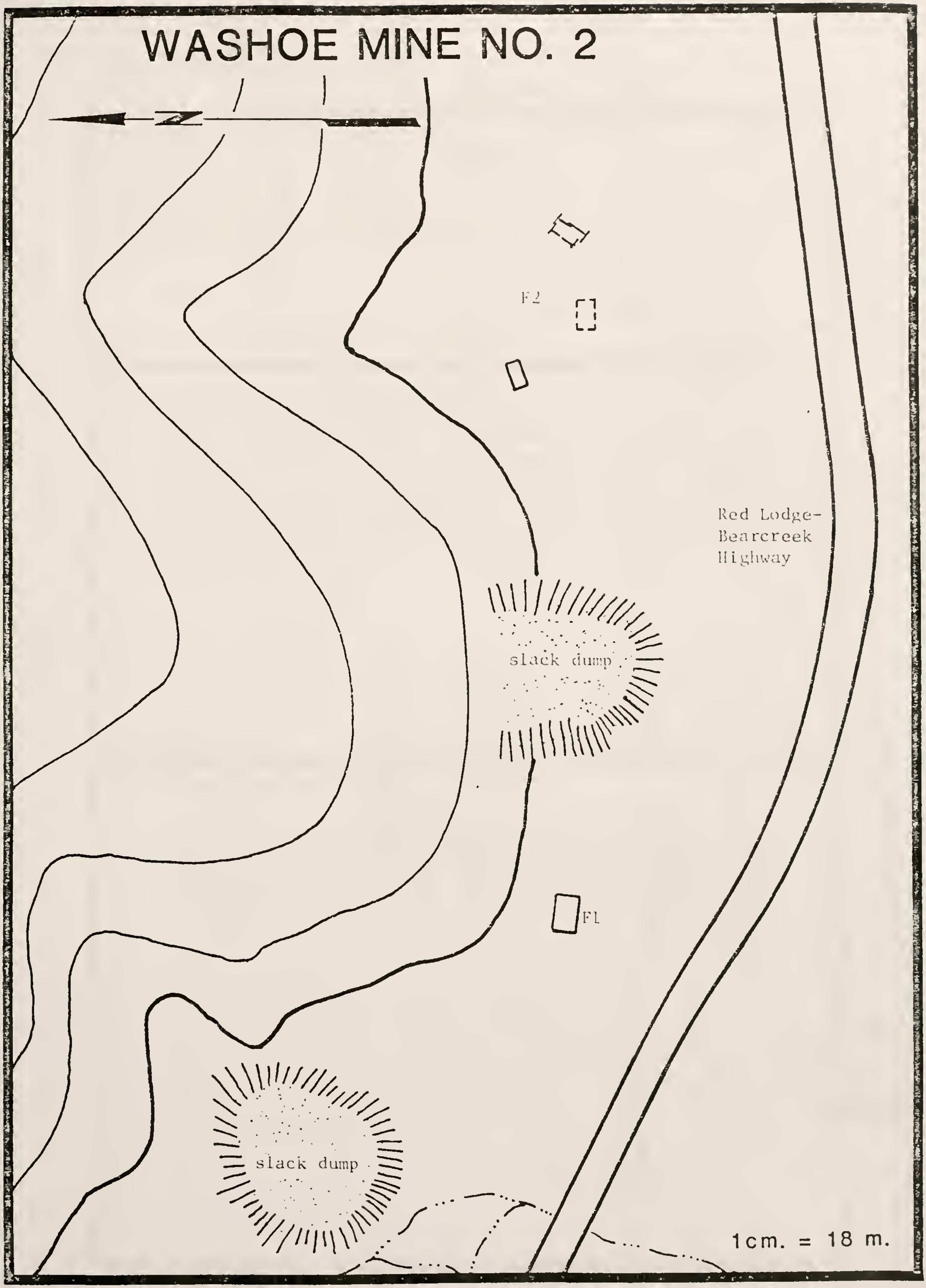
6. Track Book Reference:

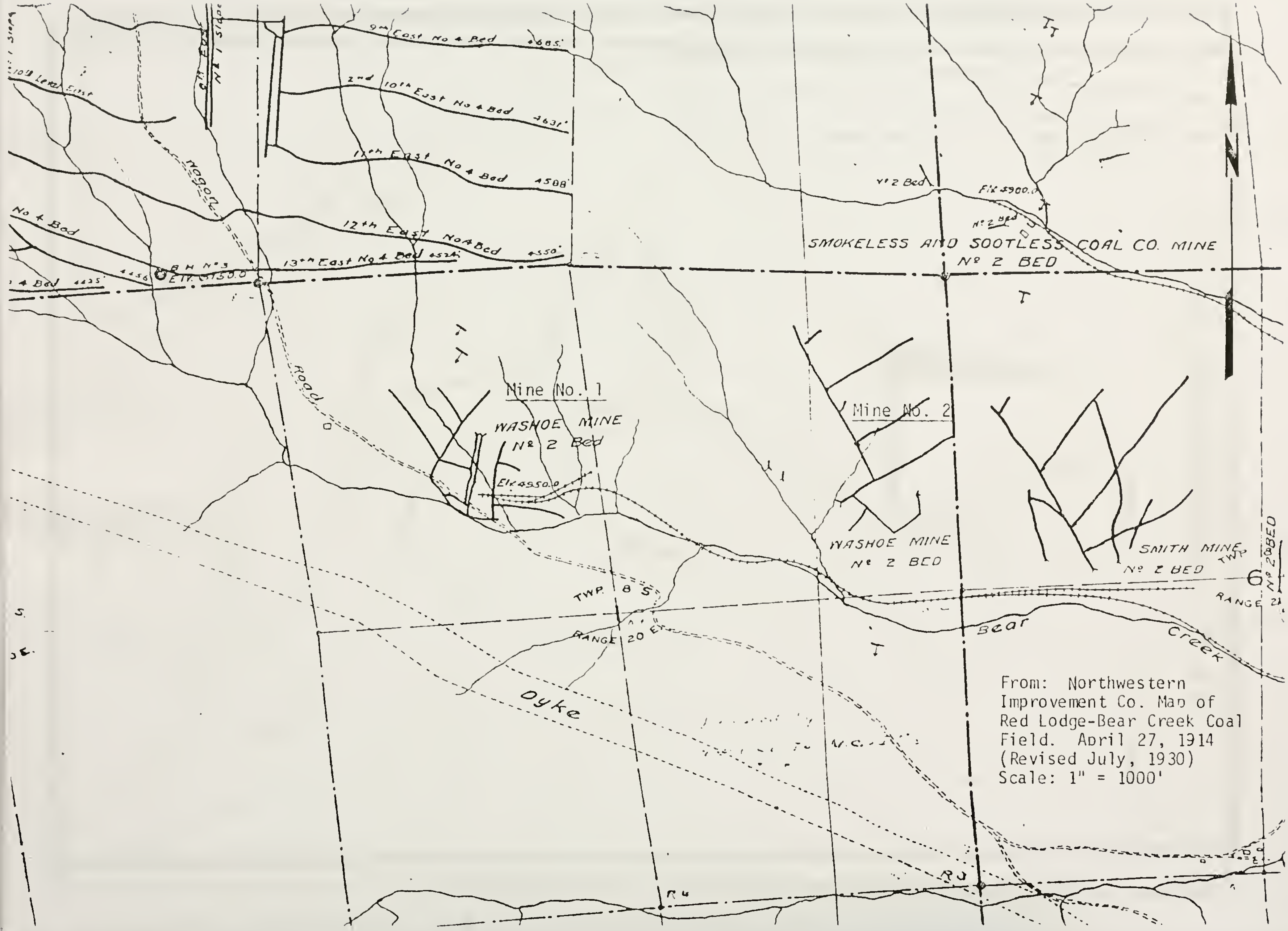
Name	Type of Entry HE, CE, DLE, other	Serial No.	Patent No.	Representation on GLO Plat

10. Noted events associated with property or with persons associated with property:


WASHOE MINE NO. 1
N
blowup F2
1cm. = 7.2 m.
F2
F4
coal waste
dump
F5
F3
portal
F1
Red Lodge-Bearcreek Highway
1cm = 29m.

WASHOE MINE NO. 2





From: Northwestern
Improvement Co. Map of
Red Lodge-Bear Creek Coal
Field. April 27, 1914
(Revised July, 1930)
Scale: 1" = 1000'

CULTURAL RESOURCE FORM NO. 6 Site Name Washoe Mine

1. Photos:

Accession	Description	Direction
1. Proof #2 - photos #29-34		
2. Proof #5 - photos #14, 16-19		
3.		
4.		

2. National Register Statement:

Practically all traces of the once extensive Washoe Coal Mine have disappeared. Only scattered concrete footings for the tipple; a preformed concrete entrance portal for the #2 mine; a small brick structure and the concrete base for what was most likely the hoist house remain of the mine structures. Coal slack dumps constitute much of the rest of the site. The site lacks integrity and is not eligible for listing on the National Register of Historic Places.

3. Recommendations:

The Department of State Lands plans to reclaim the coal slack dumps and other disturbed areas by removal and/or reclamation. The ruins of the site have been recorded, mapped and photographed and further work on the site would not reveal additional information. No further work on the site is recommended.

SITE FORM NO. 1

GCM SERVICES INC.

P.O. BOX 3047
BUTTE, MONTANA 59702

Cultural Resource Inventory

1. Site Number

2. County Carbon

3. State Montana

4. Site Name Highway Mine

5. Other Names For Site Road Side Coal Company

6. City or Town Bearcreek Vicinity of X

7. Map Reference
USGS
Red Lodge, Mont.
N450.5-W10907.5/7.5
1969

8. Township & Range Number T8S R21E

9. Section Number SE ¼ NW ¼ SW ¼ Sect 5

10. Latitude 45° 09' 28"

11. Longitude 109° 10' 20

12. U T M Reference 1 2 | 6 4 3 8 0 0 | 5 0 0 1 6 5 0
Zone Easting Northing

13. Publications
Kuhlman, Fay. Bearcreek. Banner Press, Bearcreek, Montana 1972.

Surface Ownership
15. Federal State Private X

16. Mineral Ownership
Federal State Private X
All Minerals
Coal Only

17. Project Name
Department of State Lands Abandoned Mines Project

18. National Register
On
Nominated
Determined Eligible
Recommended X
Need Data
Not Eligible

19. Site located by & Date P.Anderson 10/13/82

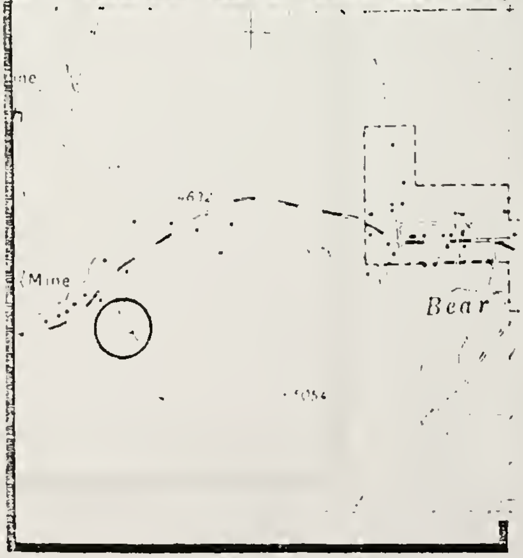
20. This Record by & Date P. Anderson 4/6/83

21. Revisions by & Date

22. Site Category
Historic X
Prehistoric
Other specify

23. Site Status
Survey X
Photo/map X
Tested
Excavated
Other specify
Comment

14. Narrative of site location and access to site
The site is located adjacent to the south side of highway one half mile west of Bearcreek.



SITE FORM NO. 2

SETTING AND CONDITION OF SITE

Site Name Highway Mine

Phytogeography

1. Elevation
1433 Meters 4700 Feet

2. Distance, direction and nature of nearest water source

Bear Creek is 200 m north of the mine

3. Soil (color, character, depth)

4. Geographic land form/ topography character/ slope / site faces:

stream bottom with the site on the south side of the stream in a coulee which runs north/south from the north facing hill

5 General vegetative community

arid, hilly grasslands

6 On-site vegetation

rangegrasses, sagebrush and Rhus

Site condition

7. Natural deterioration

Degree	Type
none	sheetwash
light	gully
moderate X	wind erosion
heavy	animal disturb.
complete	natural weathering

8 Human Disturbance (real/potential)

Degree	Type	Distance From
light	buildings	
moderate	towers	
complete	roads	
unknown X		

Comments

9. Environmental/Economic threats to site

Private development	X Public works project
Zoning	Mining
Vandalism, deterioration	Other (specify)

Comments: The Department of State Lands has no current plans for reclamation of this site due to owner opposition. If permission is granted in the future, the Department would reclaim or remove waste areas and would close open adits and remove dangerous structures.

Site Name: Highway Mine

HOMESTEAD/RANCH/FARM GENERAL FORM No.

1. General Description: (no. of buildings, general use, etc.)
(see attachment)

Key to site sketch map and individual feature/building forms.

2. Historic Ownership:
(1) Frank and Leopold Janskovitch
(2)
(3)

3. Date of construction:

4. Use (present, original):

5. Names Associated with Title:

Name (last name first)	Dates(s)	Deed Book Ref.

6. Track Book Reference:

Name	Type of Entry HE, CE, DLE, other	Serial No.	Patent No.	Representation on GLO Plat

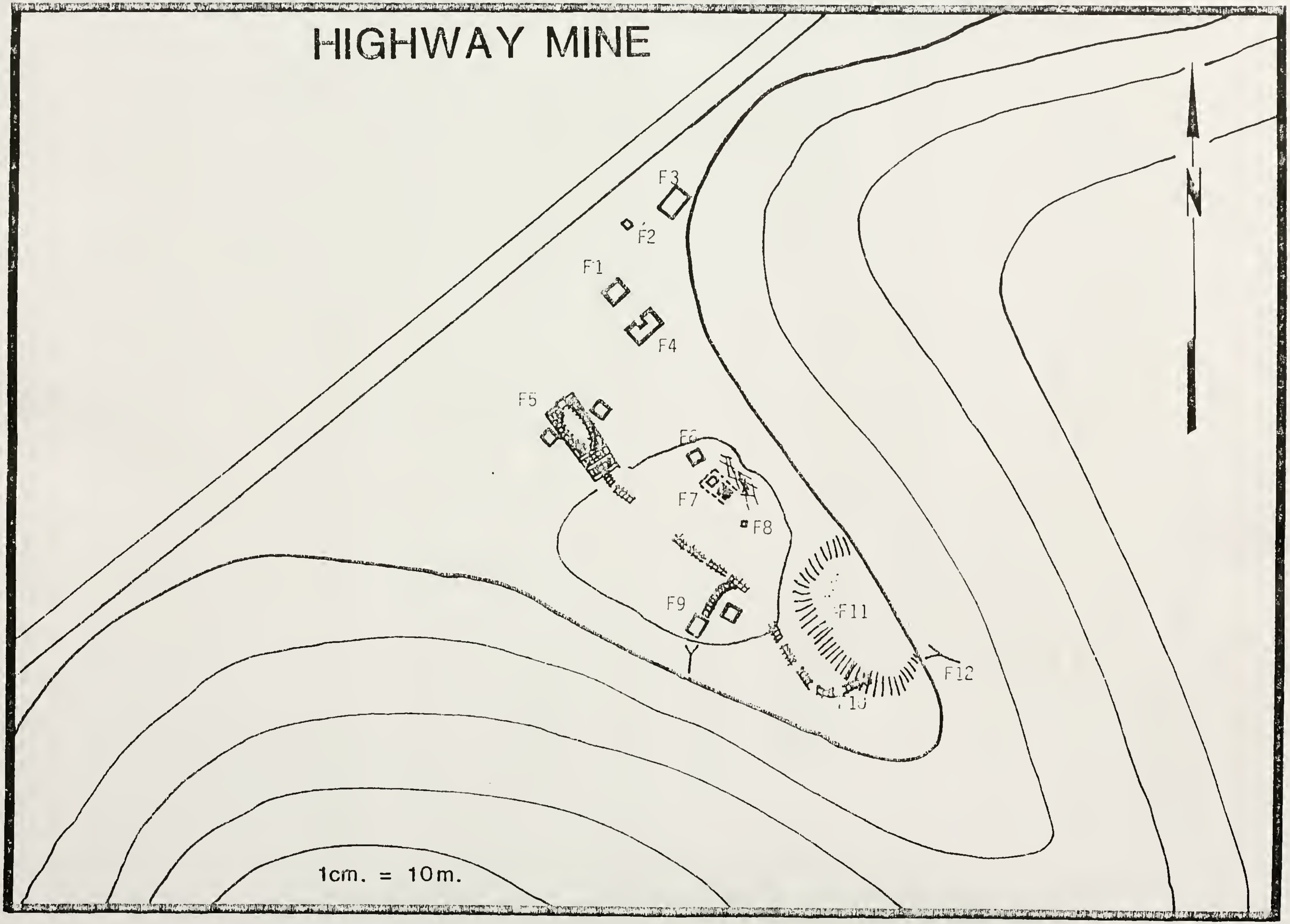
10. Noted events associated with property or with persons associated with property:

Attachment

1. General Description: (no. of buildings, general use, etc.)

   1. a small 5 x 5 m wood frame office building - written on the front is: "Road Side Coal Lump Stoker Stove"
   2. outhouse (1.5 x 1.5 m)
   3. wood shack (3 x 4 m)
   4. concrete foundation
   5. wood tipple (5 x 50 m)
   6. metal fuel tank
   7. two mine coal cars and a junked truck (with 1945 Montana license)
   8. headstone ingraved: "Samuel Alexander Born - Oct. 24, 1885 Died - Feb. 27, 1943" (date of the Smith Mine disaster)
   9. small shack (2 x 2 m) and wood entrance to adit
   10. ruins of a small trestle and RR tracks from mine to tipple
   11. coal slack dump
   12. adit entrance

HIGHWAY MINE



CULTURAL RESOURCE FORM NO. 6

Site Name Highway Mine

1. Photos:

Accession	Description	Direction
1. Proof #3 - photos #18-25		
2.		
3.		
4.		

2. National Register Statement:

The site is a fairly intact example of the small, independent mine which sold coal to the local market - typical of most large coal producing areas. The integrity of this site remains good. However, the mine was first developed less than 50 years ago which makes it ineligible for listing on the National Register of Historic Places.

3. Recommendations:

The remains of the site have been examined, recorded, mapped and photographed. No further work on the site is recommended.

SITE FORM NO. 1

GCM SERVICES INC.

P.O. BOX 3047
BUTTE, MONTANA 59702

Cultural Resource Inventory

1 Site Number

2. County Carbon

3 State Montana

4 Site Name
Burns Mine

5 Other Names For Site

6 City or Town Vicinity of X
Bearcreek

7. Map Reference
USGS Red Lodge, Mont.
N450.5-W10907.5/7.5
1969

8. Township & Range Number
T8S R21E

9 Section Number
SE¼ SW¼ & SW¼ SE¼ of SE¼ Sec. 6
NE¼ NW¼ & NW¼ NE¼ of NE¼ Sec. 7

10. Latitude
45° 09' 10"

11. Longitude
109° 10' 50"

12. U T M Reference
1 2 | 6 4 3 1 7 0 | 5 0 0 1 5 0 0
Zone | Easting | Northing

13 Publications

Surface Ownership:
15 Federal State Private

16 Mineral Ownership
Federal State Private
All Minerals
Coal Only

17 Project Name
Department of State Lands
Abandoned Mines Project

18 National Register
On
Nominated
Determined Eligible
Recommended
Need Data
Not Eligible X

19 Site located by & Date
P. Anderson
10/14/82

20. This Record by & Date
P. Anderson
4/7/83

21. Revisions by & Date

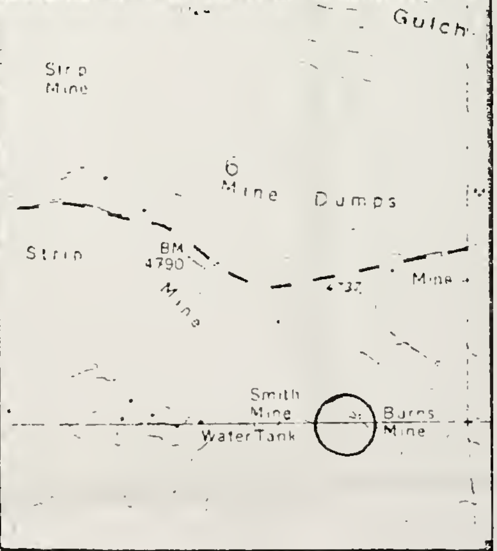
22 Site Category
Historic X
Prehistoric
Other specify

23 Site Status
Survey X
Photo/map X
Tested
Excavated
Other specify

Comment

14 Narrative of site location and access to site

The site is located about 300 m up the small side coulee wich runs into Bear Creek some 200 m south of the Bearcreek-Red Lodge highway. The dirt road which heads up the Bear Creek Coulee will take one to the bottom of the side coulee and then a short walk will bring one to the site.



SITE FORM NO. 2

SETTING AND CONDITION OF SITE

Site Name Burns Mine

Phytogeography

1. Elevation
1475 Meters 4840 Feet

2. Distance, direction and nature of nearest water source
Bear Creek is located about 400 m northwest of the site.

3. Soil (color, character, depth)

5. General vegetative community
arid grasslands

6. On site vegetation
Range grasses, sagebrush and *Rhus*

4. Geographic land form/ topography character/ slope / site faces:
The site is on the southwest facing side of a small coulee which runs into the larger Bear Creek stream valley.

Site condition

7. Natural deterioration

Degree	Type
none	sheetwash
light ______	gully ______
moderate ______	wind erosion ______
heavy X	animal disturb.
complete ______	natural weathering

8. Human Disturbance (real/potential)

Degree	Type	Distance From
light	buildings ____	____
moderate	towers	____
complete X	roads	____
unknown ______		

Comments: The Department of State Lands will remove structures and waste dumps and other disturbed areas.

9. Environmental/Economic threats to site
______Private development
______Zoning
______Vandalism, deterioration
X Public works project
Mining
Other (specify)

Comments: The Department of State Lands, as part of its abandoned mines project, plans to remove dangerous structures, close open adits and either remove or reclaim waste dumps and other disturbed areas.

Site Name: Burns Mine

HOMESTEAD/RANCH/FARM GENERAL FORM No.

1. General Description: (no. of buildings, general use, etc.)
   1. ruins of a small, wooden tipple
   2. a small 8 x 8 m wood frame building
   3. a tin sided outhouse
   4. a stone dugout powder magazine
   5. wood shack which may have been a ventilation shaft
   6. a tracked coal loading machine similar to a Joy Mfg. Co. loader
   7. coal slack dumps and misc. debris
   8. junked truck (1920s or 1930s vintage)
   9 a collapsed structure - use unknown

   Key to site sketch map and individual feature/building forms.

2. Historic Ownership:
   (1) Robert Burns
   (leased from The Montana Coal and Iron
   (2) Company)
   (3)

3. Date of construction:
   1920s

4. Use (present, original):

5. Names Associated with Title:

Name (last name first)	Dates(s)	Deed Book Ref.

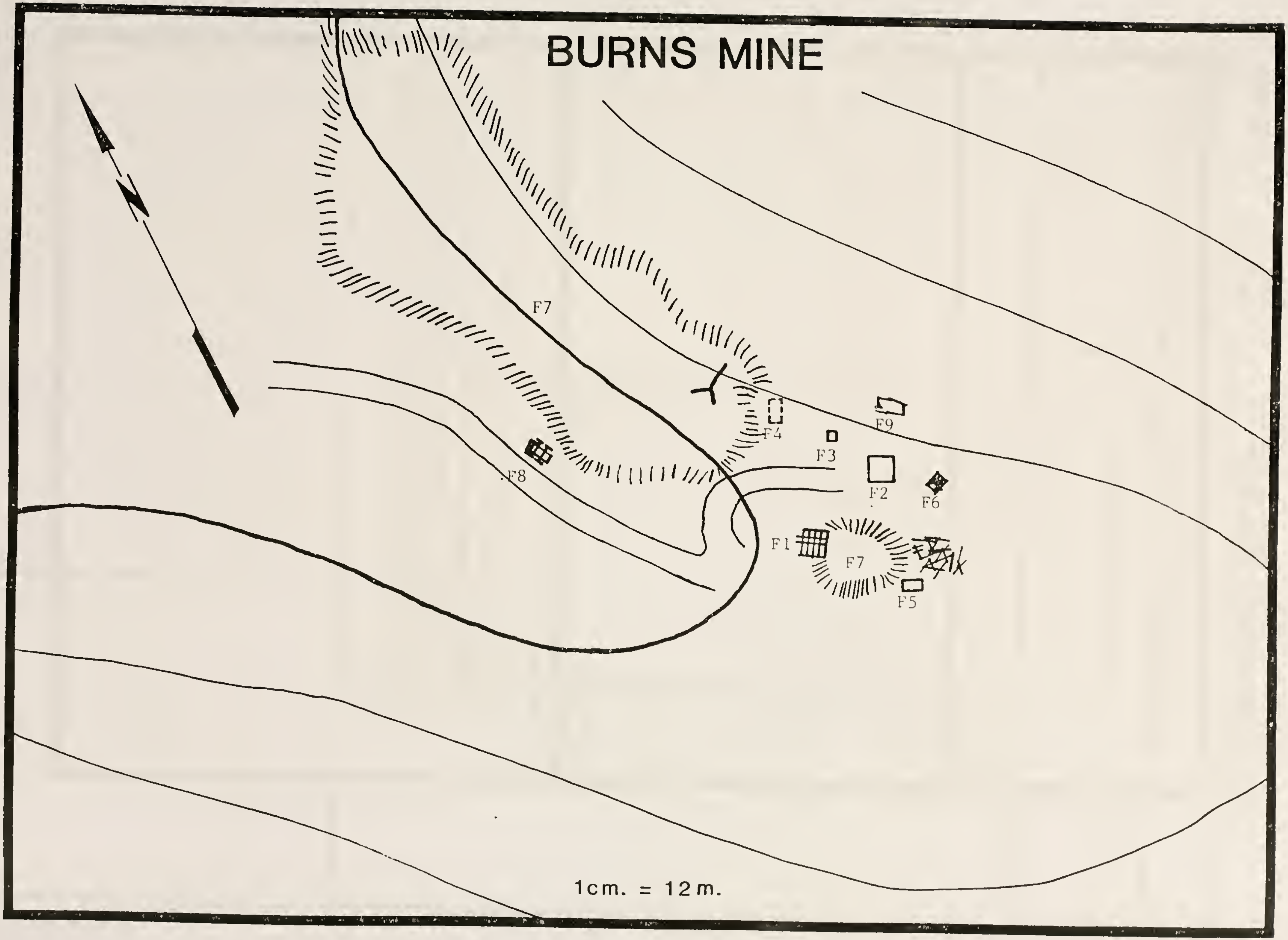
6. Track Book Reference:

Name	Type of Entry HE, CE, DLE, other	Serial No.	Patent No.	Representation on GLO Plat

10. Noted events associated with property or with persons associated with property:

D30

BURNS MINE



CULTURAL RESOURCE FORM NO. 6

Site Name Burns Mine

1. Photos:

Accession	Description	Direction
1. Proof #4 - photos 1-8		
2.		
3.		
4.		

2. National Register Statement:

The site is basically in ruins and lacks the integrity of its original condition, nor was it of any particular significance when it was in operation. The site does not meet the criteria for nomination to the National Register of Historic Places.

3. Recommendations:

The Department of State Lands plans to close the open adits; eliminate the dumps and other disturbed areas through removal and/or reclamation; and remove the remains structures on the site. The ruins of the mine have been recorded, mapped and photographed and further work on the site would not reveal additional information. No further work on the site is recommended.

SITE FORM NO. 1

GCM SERVICES INC.

P.O. BOX 3047
BUTTE, MONTANA 59702

Cultural Resource Inventory

1. Site Number

2. County Carbon

3. State Montana

4. Site Name
The Smith Mine Complex (The Montana Coal and Iron Co.)

5. Other Names For Site
Foster Mine / Lamport Mine

6. City or Town Vicinity of X
Bearcreek

7. Map Reference
USGS Red Lodge, Mont.
N450.5-W10907.5/7.5
1969

8. Township & Range Number
T8S R21E

9. Section Number (I) NW¼ Sec. 6 (II) SE¼ SW¼ & SW¼SE¼ Sec. 6 (III)SE¼ Sec. 7 & NW¼ SW¼, NW¼ Sec. 8 (IV) NE¼ SE¼ Sec. 6

10. Latitude
(see attachment I)

11. Longitude
(see attachment I)

12. U.T.M. Reference
1 2 (see attachment I)
Zone Easting Northing

Surface Ownership
15. Federal State Private X
Jim Slack

16 Mineral Ownership:
Federal State Private X
All Minerals
Coal Only

17. Project Name
Department of State Lands
Abandoned Mines Project

18. National Register
On
Nominated
Determined Eligible
Recommended X
Need Data
Not Eligible

19. Site located by & Date
P. Anderson
10/13/82

20. This Record by & Date
P. Anderson
4/11/83

21. Revisions by & Date

22. Site Category
Historic X
Prehistoric
Other specify

23. Site Status
Survey X
Photo/map X
Tested
Excavated
Other specify
Comment:

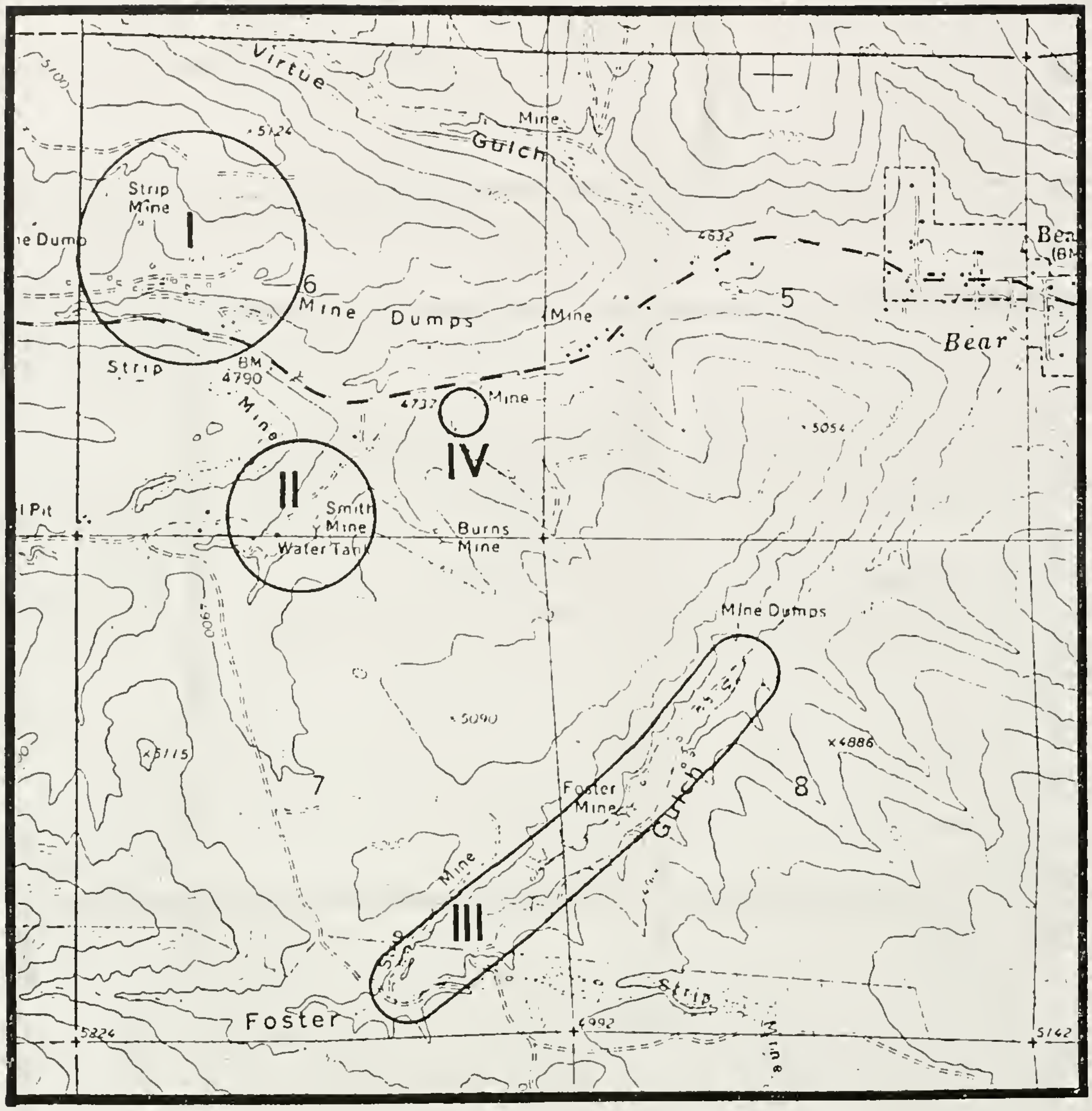
13 Publications
Kuhlman, Fay. Bearcreek Montana. Banner Press, 1972.
Chadwick, Robert A. "Coal: Montana's Prosaic Treasure", Montana: The Magazine of Western History 23(4): 18-31.

14. Narrative of site location and access to site
The surface components of the Smith Mine are not contiguous. However, the four surface components are easily reached by roads west and southwest of Bearcreek. The main mine is adjacent to and north of the highway two miles west of Bearcreek. Smith II is about ½ mile south of the highway up Bear Creek Coulee. Smith III is reached via the road south from Bearcreek up Foster Gulch Coulee. Smith IV is adjacent to and south of the highway at the mouth of the small coulee at the SE ¼ of sec. 6.

(see attachment)

Attach
Topo Section
USGS 7 5' Preferred

ATTACHMENT I



10. Latitude
(I) 45° 09' 35" (II) 45° 09' 10" (III) 45° 08' 30-58"
(IV) 45° 09' 27"

11. Longitude
(I) 109° 11' 35" (II) 109° 11' 10" (III) 109° 10' 00-40"
(IV) 109° 10' 48"

12. U.T.M. Reference
(I) 642,250 E. (II) 642,780 E. (III) 643,400-643,900 E.
(IV) 643,200 E.

(I) 5,002,350 N. (II) 5,001,550 N. (III) 5,000,300-5,001,000 N.
(IV) 5,001,950 N.

SITE FORM NO. 2

SETTING AND CONDITION OF SITE

Site Name Smith Mine Complex

Phylogeography

1. Elevation (I) 4800'/1463 m (II) 4800'/1463 m (III) 4700'/1433 m (IV) 4700'/1433 m

2. Distance, direction and nature of nearest water source

(I) is adjacent to and north of Scotch Coulee creek - (II) is adjacent to and south of Bear Creek - (III) is adjacent to Foster Gulch creek - (IV) is adjacent to and south of Bear Creek

3. Soil (color, character, depth)

5. General vegetative community

arid, hilly grasslands

6. On-site vegetation

rangegrasses, cactus, sagebrush, Rhus, and cottonwood trees along the streams

4. Geographic land form/ topography character/ slope / site faces:

All parts of the Smith Mine complex are located on either the bench areas or the hillsides adjacent to the streams.

Site condition

7. Natural deterioration

Degree
none
light X
moderate X
heavy
complete

Type
sheetwash
gully
wind erosion
animal disturb
natural weathering

8. Human Disturbance (real/potential)

Degree
light
moderate
complete
unknown X

Type
buildings
towers
roads

Distance From

Comments:

9. Environmental/Economic threats to site

Private development
Zoning
Vandalism, deterioration
X Public works project
Mining
Other (specify)

Comments: The Department of State Lands, as part of its abandoned mines program, plans to remove or reclaim waste areas which pose a threat to the area's water. Open adits will be closed and hazardous structures will be removed in the interest of public safety.

Site Name: Smith Mine Complex

HOMESTEAD/RANCH/FARM GENERAL FORM No.

1. General Description: (no. of buildings, general use, etc.)

(see attachment II)

Key to site sketch map and individual feature/building forms.

2. Historic Ownership:

(1) The Montana Coal and Iron Company (first owned by Elijah Smith and

(2) George T. Lamport)

(3)

3. Date of construction:
1900-1953

4. Use (present, original):

5. Names Associated with Title:

Name (last name first)	Dates(s)	Deed Book Ref.

6. Track Book Reference:

Name	Type of Entry HE, CE, DLE, other	Serial No.	Patent No.	Representation on GLO Plat

10. Noted events associated with property or with persons associated with property:

The Smith Mine was the site of Montana's greatest coal mining disaster on February 27, 1943 when 74 men were killed in a gas explosion in the mine.

D30

ATTACHMENT II

1. General Description: (no. of buildings, general use, etc.)

(I) (Smith No. 3)

Feature no.

1. The main office building. This wood frame L-shaped building measures 19 x 18 x 8 m. The long side has four windows. The simple gable roof is covered with asphalt roofing material.

2. Main shop. This large (11.5 x 35 m) tin-sided structure has a simple gable roof with 10 small windows on the long sides while large doors are on the ends.

3. Payroll office. This structure is similar to the shop in construction and material although smaller and taller measuring 5 x 7 m. The build-probably served as the payroll office since it was filled with cancelled payroll checks.

4. Loading dock. This feature consists of a cut into the embankment with a retaining wall about five meters long. Debris is scattered at the base of wall.

5. Tipple. The structure measures 6 x 13 m and is constructed of of I-beams with tin siding. It projects over the embankment and is two stories high on the south end. A wood beam ramp some 12 meters long projects from the east side of the tipple to a large waste dump. A small 1.5 x 2 m shack projects from the northeast corner.

6. Conveyor ramp. The 50 meter long conveyor belt runs from the base of the tipple up to the top of the coal crusher plant.

7. Coal crusher plant. This large structure consists of two separate parts at a slight angle to each other. The east part measures 10 x 13 m with the conveyor passing over the top of it. Concrete footings for heavy equipment are inside. The west section measures 15 x 37 m. A vertical bucket conveyor is located on the outside of the north wall while two horizonal loading ramps with hoppers project from the south wall. Both sections are constructed of concrete, I-beams, wood and sided with tin. The structures are where the coal would have been cleaned, sorted and crushed before shipping to markets.

8,9,10. Sheds. These three features are small wood and tin sheds of unknown use.

11. Boilers. The major portion of the structure covering the boilers has been removed although the boilers themselves are still in place. Stone walls once enclosed the structure and portions are still standing. A small wood shack remains standing on the south side.

12. A small outhouse.

13. Geology/assay/shop building. The stucture measures 15 x 47 m. A simple gable tin roof covers the main portion while a shed roof covers the back (north) part of the structure. A cupola is located on the peak of the roof at the east end. The structure appears to have served as a geology and assay lab and a shop area.

14. Transformer building. The wood and tin structure measures 3.5 x 4 m. A long ventilation cupola covers much of the roof.

15. Supply building. The structure measures 11 x 19 m and is similar in construction and appearance to the assay building. It appears to have been used as a supply building for small parts and supplies for the mine.

16. Powder magazine. The small stone structure measures 1.5 x 2 m and is only one meter high. Two iron doors are on the front (south) side.

17. Building. This small (3 x 4 m) house-like structure is constructed of cinder blocks with a wood roof. Its use is unknown.

18. Garage. The small (3 x 1.5 m) garage is constructed of wood and tin.

19. Shed. This wood shed measures 2 x 12 m. Its use is unknown.

20. Tin building. This 4 x 7 m tin structure's original use is unknown.

21. House and sheds. The house is a frame construction with two wood frame outbuildings. It is not known if they were associated with the mine.

22. Powder magazine. The magazine is constructed of stone with an iron door. It is covered with a stone, barrel-arched roof. It measures 1.5 x 2.5 m.

23. Slack dumps. Coal waste dumps are located at the east end of the site.

24. Misc. Miscellaneous debris is scattered throughout the site. Junked machinery and parts of ore cars are scattered in the gully on the west side of the site.

(II) (Lamport Mine)

1. Barn. This wood frame barn has partially collapsed. It measures 10 x 12 m.

2. House. The house measures 9 x 12 m and is a wood frame construction with a simple gable roof.

3. Collapsed shack. Only a pile of debris remain of what was probably a small shack. It is not known if this shack and features # 1 & 2 were associated with the mine.

(Attachment II - cont. 3)

Feature no.

4. Water tank. The tank is of metal construction and measures four meters in diameter.

5. Pump house. This small (1 x 1 m) pump house is constructed of concrete.

6. Stone foundation. The foundation measures 3 x 5 m.

7. Dugout. The ruins of this dugout also measure 3 x 5 m. The dugout and feature #6 were most likely outbuildings for feature #8.

8. House. The wood frame house has partially collapsed and measures 9 x 12 m. The house and features #6 & 7 may have been used by George T. Lamport who first developed the mine in 1897.

9. Collapsed structure. No details could be discerned as to the original appearance or use of this structure although it probably was an outbuilding associated with feature #8.

10. Stone building. This 3 x 5 m structure is built of stone with a log cap on the walls and a wood roof. It appears quite old and its location next to the creek indicate that it might have been a spring house used by Lamport to keep perishable foods cool.

11. Concrete structure. This concrete structure measures 6 x 8 m and may have served as a housing for a ventilation fan. A sloping wood adit or ventilation entrance is on the north side of the structure.

12. Adit portal. The adit entrance appears to have been the main adit for hauling coal from the mine. Remanents of the tracks coming out of the mine are still visible.

13. Tipple. This substantial structure measures 8 x 17 m. It is constructed of concrete with a metal gable and roof. Seven windows are are found on the long sides (east and west). The main entrance is located on the south end and the RR tracks leading into the structure are still in place. It appears the coal was transported from the north end although the rail line is no longer visible.

14. Power station. The structure is built of concrete and measures 6 x 11 m. It has a flat roof with a ventilation cupola on top. It appears to have been used as a housing for either transformers or generators for power to the mine.

15. Assay lab. The structure rests on a concrete base and is built of wood. It measures 5 x 6 m and appears to have been used as an assay lab.

16. Concrete foundation. The foundation measures 8 x 22 m and only the floor and one meter high walls remain. . Its original use is unknown.

17. Dugouts. The three dugouts are on the hillside west of the stream. They

Feature no.

are all about 3 x 5 m. Two have stone fronts while the middle one is built of wood. Whether they were used by miners is unknown.

18. Concrete structure. This L-shaped concrete structure measures 2 x 5 x 10 m with a doorway on the south end. An earthern embankment is connected to the east end. Its function is not known.

19. Loading trestle. This wood trestle extends from the hillside on the west side of Bear Creek and extends over the creek. A wood hopper is located in the center of the trestle. The structure is approximately 75 meters long.

20. Stone building. This 7 x 12 m stone structure is adjacent to the trestle. Its original function is unknown.

(III) (Foster Gulch Mines)

1. Ore bin. This 3 x 4 m wood ore bin does not appear to be located where it was originally used.

2. Tin shack. This small 2 x 3 m shack's original use is unknown.

3. Concrete structure. The structure measures 6 x 8 m and is attached to the ruins of the boiler housing. Its original function is unknown.

4. Boiler housing. This imposing concrete structure measures 10 x 36 m and is approximately 15 m high. The ruins are covered with a round metal roof.

5. Tipple. The structure was constructed of concrete, wood and iron beams. It is in ruins but originally measured about 8 x 10 m with a wood beam trestle running some 40 m to the northeast. The ruins of a conveyor are located at the bottom level of the structure and extends to the east towards the boiler housing.

6. Shack. This nondescript wood frame structure measures 3 x 4 m. Its use is unknown.

7. Stone house. This stone house was probably used as living quarters for mine personnel. It measures 7 x 9 m.

8. Machine shop. The structure measures 12 x 38 m. It is sided with tin and has a simple gable tin roof. A small ventilation cupola is on the peak of the roof. The structure appears to have served as a general machine shop for repair and maintenance of mine equipment.

9. Tin building. This 3 x 10 m tin sided building's original purpose is unknown.

(Attachment II - cont. 5)

Feature no.

10. Shacks and dugout. These four shacks and one dugout were probably used as dwellings by miners. The all measure about 3 x 5 m and are of frame construction while the dugout has a stone front.

11. Bridge foundation. Only the concrete foundations remain of the small bridge covering the stream.

12. Loading bin. The bin is smilar to feature #1 although this one appears to be located where it was used.

13. The "dry" building. The structure is similar in appearance and size to the machine shop (feature #8). It measures 12 x 33 m and is sided with tin sheets. The building appears to have been used as a "dry" (the wash room, showers and drying area used by miners) and as an office building.

14. Wood building. This 5 x 5 m wood frame building appears to have been used for storage.

15. Adit This open adit extends into the hillside in a northwesterly direction.

16. Electric house. This structure is built of stone and measures 8 x 10 m. Only the walls remain standing with some of the electric switches and panels remain on the inside walls. The building appears to have been the main power station for the mine.

17. Shack. The small shack measures 3 x 5 m. Its function is unknown.

18. Ventilation housing and adit. The small 1.5 x 2 structure is constructed of brick with a large (.8 m) pipe protruding from the north side. The structure appears to have housed a ventilation fan. Adjacent to the north side of the structure is an adit portal extending west into the hillside.

19 & 20. Shacks. These two small shacks measure 2 x 3 m. Their use is unknown.

21. Adits. Three adit portals are located on the hillside and extend to the west and southwest.

22. Concrete building. The 3 x 6 m structure is built of concrete. Its original function is not known.

23. Shack. The shack measures 3 x 4 m and its function is not known.

24. Ramp. This small loading ramp is built of wood and measures 4 x 7 m.

25 & 26. Adits. These two adit entrances are on the east side of the coulee. A pile of cinder blocks are found in front of #26.

27. Misc. Miscellaneous debris is scattered throughout the site. Large coal slack dumps are located at the north end of the site and small areas of waste are scattered over most of the site.

(Attachment II - cont. 6)

(IV) (Bear Creek Prospect)

Feature no.

1. House. The house is a wood frame construction and measures 5 x 8 m
2. Garage. This wood frame, tin-sided garage measures 2.5 x 4 m. It is not known if this and feature #1 were associated with the mine.
3. Adits and slack dump. Two open adits extend into the hillside to the south. A small coal slack dump is in front of the adit portals.
4. Slack dump. This coal slack dump is located up the gully some 200 m from feature #3. No adit opening was observed.
5. Slack. This small scatter of coal slack is located at the top of the gully some 600 m from feature #3. No other evidence of mining activity was found and the slack may be a natural feature.

CULTURAL RESOURCE FORM NO. 6

Site Name Smith Mine Complex

1. Photos:

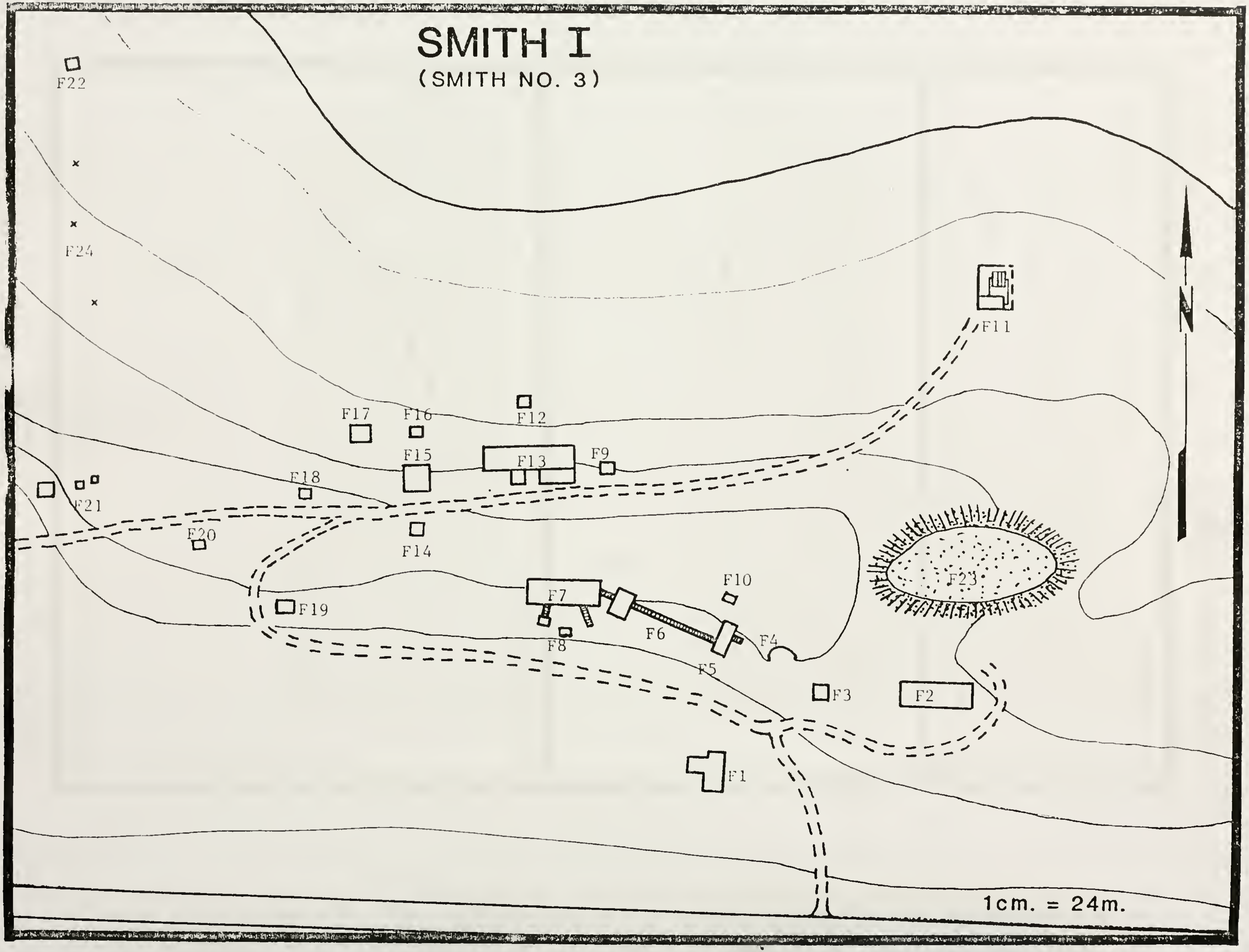
Accession	Description	Direction
1. Proof #2 - photos 6-26		
2. Proof #3 - photos 1-17,26-34		
3. Proof #4 - photos 9-34		
4. Proof #5 - photos 1-19		

2. National Register Statement:

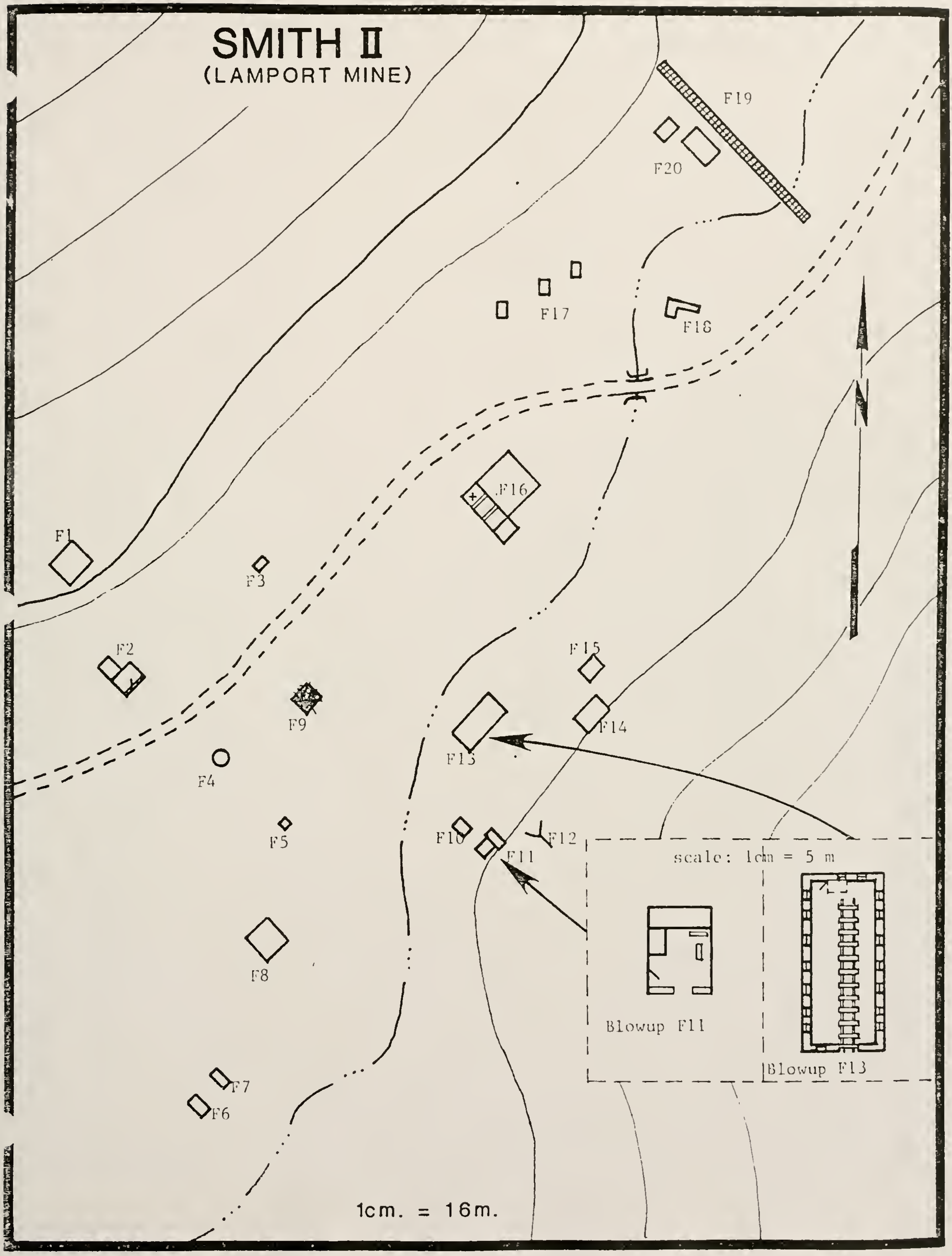
The Smith Mine is eligible for nomination to the National Register of Historic Places under criteria a, b and d. The integrity of the site is good with much of the mine complex still intact. The mine is one of the few examples of a historic underground coal mine in Montana which has not been torn down or destroyed. It is also the scene of a major historic event. On February 27, 1943 a gas explosion took place inside the mine which took the lives of 74 miners making it the greatest coal mining disaster in Montana's history.

3. Recommendations:

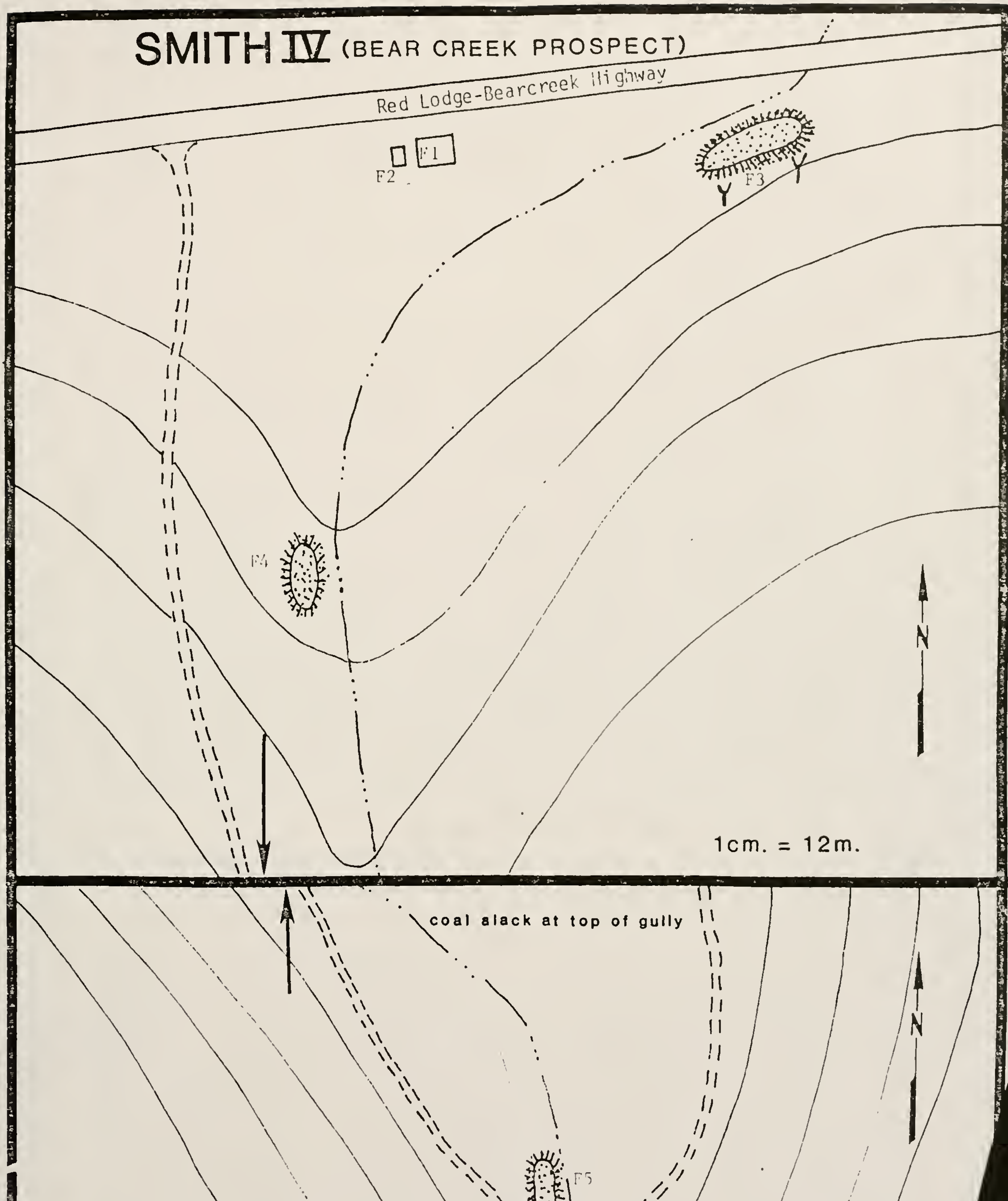
The Department of State Lands' reclamation plans will impact the site. Removal or reclamation of waste areas would reduce part of the visible evidence of mining activities. This should be an acceptable loss since the waste dumps are a serious potential source of water pollution; aesthetically they are ugly and they are a minor component of the mining complex. Open adits are a serious safety hazard and should be closed. Their removal would be an acceptable loss. If any structures are determined to be safety hazards and have to be removed, it is recommended they be photographed and recorded in detail as a mitigation measure.

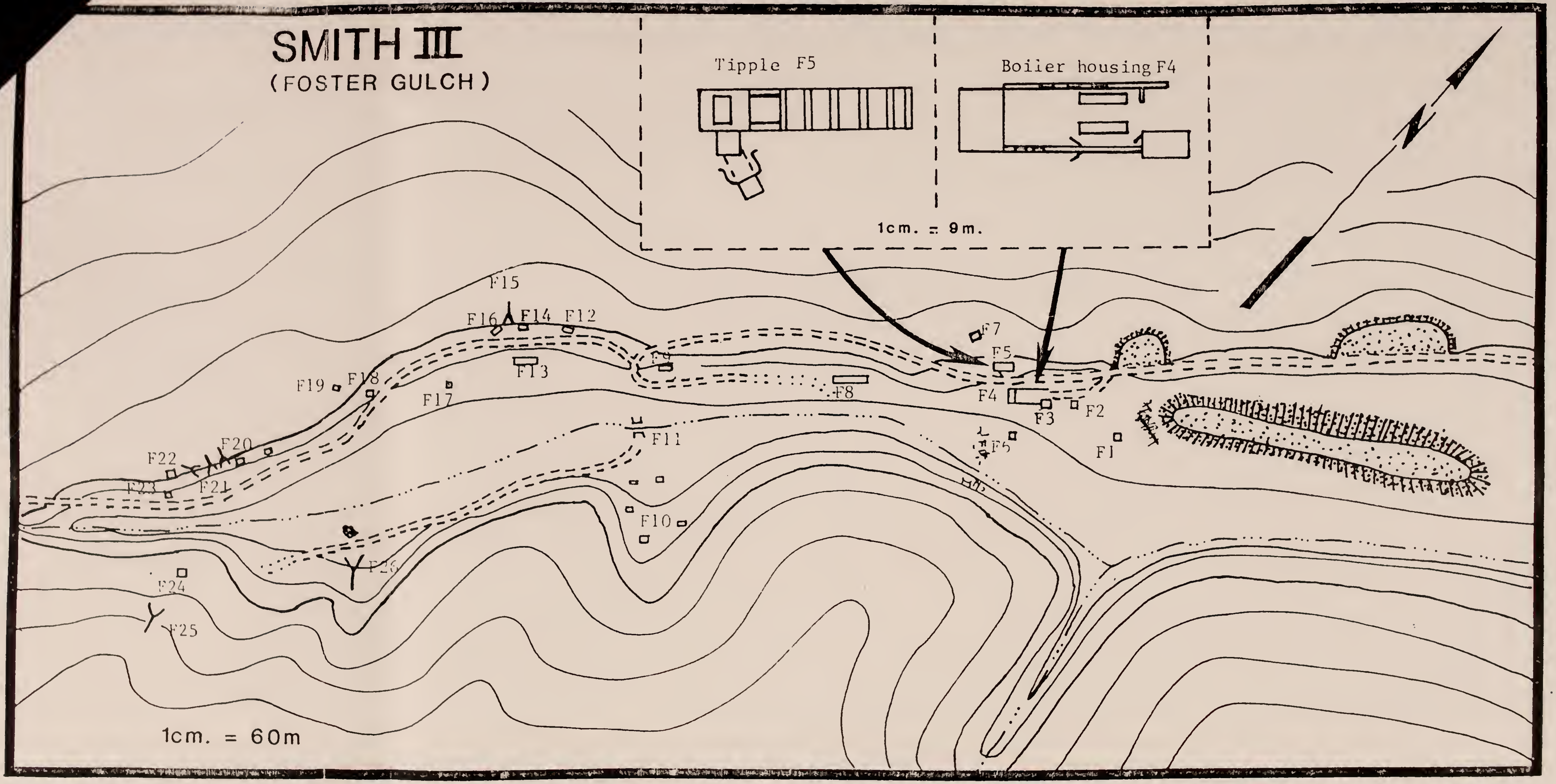


SMITH I
(SMITH NO. 3)


SMITH II
(LAMPORT MINE)

SMITH IV (BEAR CREEK PROSPECT)




SMITH III
(FOSTER GULCH)
Tipple F5
Boiler housing F4
1cm. = 9m.
F15
F16
F14
F12
F7
F5
F9
F13
F8
F4
F3
F2
F1
F19
F18
F17
F11
F6
F22
F20
F23
F21
F10
F26
F24
F25
1cm. = 60m

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